

overnight incubation of the cells. the growth media is removed and replaced with GIBCO EC-SFM. The cells are treated with the appropriate dilutions of the protein of interest or control protein sample(s) (prepared in SFM) in triplicate wells with additional bFGF to a concentration of 10 ng/ ml. Once the cells have been treated with the samples, the plate(s) is/are placed back in the 37° C incubator for three days. After three days 10 ml of stock alamar blue (Biosource Cat# DAL1100) is added to each well and the plate(s) is/are placed back in the 37°C incubator for four hours. The plate(s) are then read at 530nm excitation and 590nm emission using the CytoFluor fluorescence reader. Direct output is recorded in relative fluorescence units.

Alamar blue is an oxidation-reduction indicator that both fluoresces and changes color in response to chemical reduction of growth medium resulting from cell growth. As cells grow in culture, innate metabolic activity results in a chemical reduction of the immediate surrounding environment. Reduction related to growth causes the indicator to change from oxidized (non-fluorescent blue) form to reduced (fluorescent red) form. i.e. stimulated proliferation will produce a stronger signal and inhibited proliferation will produce a weaker signal and the total signal is proportional to the total number of cells as well as their metabolic activity. The background level of activity is observed with the starvation medium alone. This is compared to the output observed from the positive control samples (bFGF in growth medium) and protein dilutions.

Example 47: Detection of Inhibition of a Mixed Lymphocyte Reaction

This assay can be used to detect and evaluate inhibition of a Mixed Lymphocyte Reaction (MLR) by gene products (e.g., isolated polypeptides). Inhibition of a MLR may be due to a direct effect on cell proliferation and viability, modulation of costimulatory molecules on interacting cells, modulation of adhesiveness between lymphocytes and accessory cells, or modulation of cytokine production by accessory cells. Multiple cells may be targeted by these polypeptides

since the peripheral blood mononuclear fraction used in this assay includes T, B and natural killer lymphocytes, as well as monocytes and dendritic cells.

Polypeptides of interest found to inhibit the MLR may find application in diseases associated with lymphocyte and monocyte activation or proliferation. These
5 include, but are not limited to, diseases such as asthma, arthritis, diabetes, inflammatory skin conditions, psoriasis, eczema, systemic lupus erythematosus, multiple sclerosis, glomerulonephritis, inflammatory bowel disease, crohn's disease, ulcerative colitis, arteriosclerosis, cirrhosis, graft vs. host disease, host vs. graft disease, hepatitis, leukemia and lymphoma.

10 Briefly, PBMCs from human donors are purified by density gradient centrifugation using Lymphocyte Separation Medium (LSM[®], density 1.0770 g/ml, Organon Teknika Corporation, West Chester, PA). PBMCs from two donors are adjusted to 2×10^6 cells/ml in RPMI-1640 (Life Technologies, Grand Island, NY) supplemented with 10% FCS and 2 mM glutamine. PBMCs from a third donor is
15 adjusted to 2×10^5 cells/ml. Fifty microliters of PBMCs from each donor is added to wells of a 96-well round bottom microtiter plate. Dilutions of test materials (50 μ l) is added in triplicate to microtiter wells. Test samples (of the protein of interest) are added for final dilution of 1:4; rhuIL-2 (R&D Systems, Minneapolis, MN, catalog number 202-IL) is added to a final concentration of 1 μ g/ml; anti-CD4 mAb (R&D
20 Systems, clone 34930.11, catalog number MAB379) is added to a final concentration of 10 μ g/ml. Cells are cultured for 7-8 days at 37°C in 5% CO₂, and 1 μ C of [³H] thymidine is added to wells for the last 16 hrs of culture. Cells are harvested and thymidine incorporation determined using a Packard TopCount. Data is expressed as the mean and standard deviation of triplicate determinations.

25 Samples of the protein of interest are screened in separate experiments and compared to the negative control treatment, anti-CD4 mAb, which inhibits proliferation of lymphocytes and the positive control treatment, IL-2 (either as recombinant material or supernatant), which enhances proliferation of lymphocytes.

30 One skilled in the art could easily modify the exemplified studies to test the activity of polynucleotides (e.g., gene therapy), antibodies, agonists, and/or

antagonists and fragments and variants thereof.

It will be clear that the invention may be practiced otherwise than as particularly described in the foregoing description and examples. Numerous modifications and variations of the present invention are possible in light of the above teachings and, therefore, are within the scope of the appended claims.

The entire disclosure of each document cited (including patents, patent applications, journal articles, abstracts, laboratory manuals, books, or other disclosures) in the Background of the Invention, Detailed Description, and Examples is hereby incorporated herein by reference. Further, the hard copy of the sequence listing submitted herewith and the corresponding computer readable form are both incorporated herein by reference in their entireties. Moreover, the hard copy of and the corresponding computer readable form of the Sequence Listing of Serial No. 60/124,270 are also incorporated herein by reference in their entireties.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT	
Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209059
C. ADDITIONAL INDICATIONS (leave blank if not applicable)	
This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209059**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209059

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209060
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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ATCC Deposit No.: 209060

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209060

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209061
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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ATCC Deposit No.: 209061**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209061

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209062</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer <u>Sonya D. Barnes</u> <u>PCT/Internat'l Appl Processing Div</u> <u>(703) 305-3665</u>	Authorized officer

ATCC Deposit No.: 209062

CANADA

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NORWAY

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209062

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209063
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
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ATCC Deposit No.: 209063

CANADA

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UNITED KINGDOM

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ATCC Deposit No.: 209063

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209064
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input checked="" type="checkbox"/> This sheet was received with the international application Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No.: 209064

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 209064

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209065</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: 209065

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209065

DENMARK

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file
reference number

PA101PCT

International application No.

UNASSIGNED

INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209066</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: 209066

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209066

DENMARK

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file
reference number

PA101PCT

International application No.

UNASSIGNED

INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209067</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<p><input checked="" type="checkbox"/> For receiving Office use only</p> <p><input checked="" type="checkbox"/> This sheet was received with the international application</p> <p>Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665</p>	<p><input type="checkbox"/> For International Bureau use only</p> <p><input type="checkbox"/> This sheet was received by the International Bureau on:</p> <p>Authorized officer</p>
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ATCC Deposit No.: 209067

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209067

DENMARK

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3665	Authorized officer

ATCC Deposit No.: 209068

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209068**DENMARK**

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209069
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209069

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209069

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209579
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3865	Authorized officer

ATCC Deposit No.: 209579

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209579

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209578
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209578**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209578

DENMARK

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203067
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3665	Authorized officer

ATCC Deposit No.: 203067

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 203067

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
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ATCC Deposit No.: 203068

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 203068**DENMARK**

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203609
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
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ATCC Deposit No.: 203609**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203609**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203610
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 203610**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203610

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 17 November 1998	Accession Number 203485
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: 203485**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203485

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-252
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: PTA-252**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-252**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-253
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: PTA-253**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-253**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 22 December 1999	Accession Number PTA-1081
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: PTA-1081**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: PTA-1081

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

What Is Claimed Is:

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group
5 consisting of:

(a) a polynucleotide fragment of SEQ ID NO:X or a polynucleotide fragment of the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y or a
10 polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(c) a polynucleotide encoding a polypeptide fragment of a polypeptide encoded by SEQ ID NO:X or a polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(d) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y or a
15 polypeptide domain encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(e) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in the related cDNA
20 clone, which is hybridizable to SEQ ID NO:X;

(f) a polynucleotide encoding a polypeptide of SEQ ID NO:Y or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X, having biological activity;

(g) a polynucleotide which is a variant of SEQ ID NO:X;

(h) a polynucleotide which is an allelic variant of SEQ ID NO:X;
25

(i) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;

(j) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(i), wherein said polynucleotide does not
30 hybridize under stringent conditions to a nucleic acid molecule having a nucleotide

sequence of only A residues or of only T residues.

2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a protein.

5

3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y or the polypeptide encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

10

4. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises the entire nucleotide sequence of SEQ ID NO:X or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

15

5. The isolated nucleic acid molecule of claim 2, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

20

6. The isolated nucleic acid molecule of claim 3, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

25

7. A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

8. A method of making a recombinant host cell comprising the isolated nucleic acid molecule of claim 1.

30

9. A recombinant host cell produced by the method of claim 8.

10. The recombinant host cell of claim 9 comprising vector sequences.
11. An isolated polypeptide comprising an amino acid sequence at least
5 95% identical to a sequence selected from the group consisting of:
- (a) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (b) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone, having biological activity;
 - 10 (c) a polypeptide domain of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (d) a polypeptide epitope of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (e) a full length protein of SEQ ID NO:Y or of the sequence encoded by the
15 cDNA included in the related cDNA clone;
 - (f) a variant of SEQ ID NO:Y;
 - (g) an allelic variant of SEQ ID NO:Y; or
 - (h) a species homologue of the SEQ ID NO:Y.
- 20 12. The isolated polypeptide of claim 11, wherein the full length protein comprises sequential amino acid deletions from either the C-terminus or the N-terminus.
13. An isolated antibody that binds specifically to the isolated polypeptide
25 of claim 11.
14. A recombinant host cell that expresses the isolated polypeptide of claim 11.
- 30 15. A method of making an isolated polypeptide comprising:

(a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and

(b) recovering said polypeptide.

5 16. The polypeptide produced by claim 15.

17. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.

10

18. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

(a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and

15 (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

19. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

20 (a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

25 20. A method for identifying a binding partner to the polypeptide of claim 11 comprising:

(a) contacting the polypeptide of claim 11 with a binding partner; and

(b) determining whether the binding partner effects an activity of the polypeptide.

30

21. The gene corresponding to the cDNA sequence of SEQ ID NO:Y.

22. A method of identifying an activity in a biological assay, wherein the method comprises:

- 5 (a) expressing SEQ ID NO:X in a cell;
 (b) isolating the supernatant;
 (c) detecting an activity in a biological assay; and
 (d) identifying the protein in the supernatant having the activity.

10 23. The product produced by the method of claim 20.

SEQUENCE LISTING

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Steve Ruben

<120> Human Prostate Cancer Associated Gene Sequences and Polypeptides

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<210> 11

<211> 1496

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1478)

<223> n equals a,t,g, or c

<400> 11

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<210> 12

<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1402)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1407)

<223> n equals a,t,g, or c

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<210> 13

<211> 3548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (346)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1103)

<223> n equals a,t,g, or c

<400> 13

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<210> 14

<211> 466

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (95)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<400> 14

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tgcaaagtac tttcaaggar atctgaatct ctactcttta wcaggatatg gaacagatgc 360
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<210> 15

<211> 864

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

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<222> (847)

<223> n equals a,t,g, or c

<400> 15

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<210> 16

<211> 2805

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<400> 16

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cattgcctcc taccagaact agacagtga ttagatcggt attatggaaa tgcatacaag 1920
```

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taatgtcact agggcttaat aagcagccgt ttgctaattgt gcttcctttc aaagggttgg 1980
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<210> 17
<211> 710
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (608)
<223> n equals a,t,g, or c

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ggggatttgg attgttgctc ctctgctctg aagaaagtgc tgtctggctc caactccagt 180
tctttccctt gagcagcgcc tggaacctaa cccttcccac tctgtcacct tctcgatccc 240
gccggcgctt tagagccgca gtccagtctt ggatccttca gagcctcagc cactagctgc 300
gatgcatgtg atcaagcgag atggccgcca agaacgagtc atgtttgaca aaattacatc 360
tcgaatccag aagctttgtt atggactcaa tatggatttt gttgatcctg ctcatatcac 420
catgaaagta atccaaggct tgtacagtgg ggtcaccaca gtggaactag atactttggc 480
tgctgaaaca gctgcaacct tgactactaa gcacctgac tatgctatcc tggcagccag 540
gatcgtgtgc tctaacttgc acaaagaaac aaagaaagtg ttcagtgatg tgatggaaga 600
cctctatnaa ctacataaat ccacataatg gcaaacactc tcccatgggt gccaaagtcaa 660
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<210> 18
<211> 992
<212> DNA
<213> Homo sapiens

<400> 18

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attttttact ttccccaccc agcaggatat gctggttcaa ggcctaaagt aaaatgatca 60
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tctcacagca cgtccagaag gctaaccacag gtggggagga tgctgacacc agctccaggt 480
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aaatagaata cctcaactct acgttgtttt cttggagata aataatagtt tcaagttttt 900
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<210> 19

<211> 1795

<212> DNA

<213> Homo sapiens

<400> 19

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actccaactc acatccaaag taggacaacg gtggaagcag aactatagtt tccggggagc 180
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ggatttgctg aaattggtgt tgggcatatt agcaaaatat tcttaatttg tggactcgat 1680
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<210> 20

<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (708)

<223> n equals a,t,g, or c

<400> 20

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cgctaagtag tgtgtccggc gccgtgttcc agctccgcgt tggtccgcga gaaagcgaga 120
ggccgagccc gggctggtgc gatggccgcg gtggtggcca agcgggaagg gccgccgttc 180
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tcagcgctgt cggggggccac ggccggcatc ctcggcctca ccggcctcta cggcttcac 300
ttctacctgc tcgcctccgt cctgctctcc ctgctcctca ttctcaaggc gggaaggagg 360
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ttcacctacg tcctgttctg gacgttcctc tacggcatgg tgcacgtcta ctgaaatggg 480
ggcccggggg acttttttaa aaaaccagat cgggaggact gtggccagca attaacacca 540
tgtagacttc cttagtctct aagtgggtga attcgtgct tgttctgtaa cgttataaat 600
aatatatatc tgaagacgga gagcctgtaa tattcttcag attaaatgaa gcgtgagaca 660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaccccgggg gggggccng 709

<210> 21

<211> 649

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (596)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (624)

<223> n equals a,t,g, or c

<400> 21

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aaatgcttcc aagcatgaca actttttaaag aaaaatatga tactctcaga ttttaagggg 180
gaaaactggt ctcttttaaaa tatttgtctt taaacagcaa ctacagaagt ggaagtgttt 240
gatatgtwag twcttccmct tgtgtatatt ttaatgaata ttgatgttaa caagaagggg 300
aaaaaaciaa acacaagggt tttccaatt ttaatgctgg ctccatccaa aagtttgccc 360
acaagaatga ataccttccc aaagttgaat aaatttttat ttataaaaact aaggttaaaa 420
tttggttggt tgggttcctt tttaaaacca cgggcttgcc cccttcccac acccccatcc 480
tttgctccta aatgaatcaa aaacattgcc ttgaaataaa ctgaagctta gaantatacc 540
tcctatttat gtccatttta aatttaagga aaaaggggcg aaaattttaa actaanggcn 600
caaaattttg gtttaaaact ccanaatata catgttaaat cctctgcta 649
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<210> 22

<211> 1607

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (820)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (821)

<223> n equals a,t,g, or c

<400> 22

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ttctggaaca cgggctgtac gcaggcgatc ctgtctccaa agtgctgtct aagccgtcga 180
cgggccggac acaccagctg cgcgtgcaact gcagtccctg ggccaccccg tgggtgggca 240
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cgtgcaggcc ttacgggcca cccccgacct tgaccccgag gataggggcc ccaggccagg 480
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ctgtcccca tgccacaacc tgggctcctg gctacagcag ggctccaggg actccaaata 1560
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<210> 23

<211> 578

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<400> 23

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tcttgcaggc tgctgggctg gggctaaggg ctgctcagtt tccttcagcg gggcactggg 120
aagcgccatg gcaactgcagg gcatctcggg crtggagctg tccggcctgg ccccgggccc 180
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gcagccgcgg ggagccgcgt gctgcgctac tgtgcaagcg gtcggatgtg ctgctggagc 360
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atccaaggct tatttatrc argytgagt gatttgcca rtcaggaaa cttctgccgg 480
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<210> 24

<211> 2756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (249)

<223> n equals a,t,g, or c

<400> 24

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gttgtttgca tcatttgatg ttttttcctg ctttcaatac caaaaaaatg cagatgcttt 180
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gtctggagag aaaggtcatt caaaaggaaa gtacaatggg acttgctgcc cttcatcatc 420
tcgttcccgt gccagggtgt tgttggtcac gtaaaagcct ggggaagcatc agaggagtcc 480
cggattgctg ctgctacctg gagacagggt tagcaaaata acactagtga tgaggagagag 540
gcttcttttc accataagcc tgctgtgtac accgagggcg gcaggagaag catgggaagg 600
agtcagccta agtttgca ca ttgcataaaag ggtacactaa ggtatgagct gaagctttag 660
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<210> 25

<211> 2680

<212> DNA

<213> Homo sapiens

<400> 25

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gccgagatth ctcagggtccc tccggccccc tccctggagt ccacagcgcc tccggtgtcc 180
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gtgtgaagaa gccttccaa gaaaccaagg gtttggtgat cccaatggga tgctgaaaag 540
caaccagcag ctgggtggaca ttattgagaa agtgaaacct gagatccggc tggtgattga 600
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<210> 26

<211> 1859

<212> DNA

<213> Homo sapiens

<400> 26

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ttcttatatc agtattctac gcgacttgaa acaggagctt ttgatgggag gccagcagac 480
tatttattca tgctcctctt taactggatt tgcacgtga ttactggctt agcaatggat 540
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```

<210> 27

<211> 634

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (525)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (561)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (629)

<223> n equals a,t,g, or c

<400> 27

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gcacacatca gttccaggcc ccattccatt ctctgaacat cttctgacac actgacagtg 60
ctgagcagag caaggttggg ttcgctcctc tggcagaacc tcggctctca ggaggtcctt 120
gttccaggga acagctgctt ctctggggct gggctctact ccctgcagcc cctcgacta 180
cccagctgga accagggaca acgcctgagt ccaaccctcg tgtctatatt ccagaaaacg 240
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ggcaggaaat cctcaacagg gtcaccaacc agcccgcctca atgcagaaaa actagaatct 360
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ccctattttc ctaagaccat tcgcgattta gaagttgtgg agggaggtgc tgctagattt 480
gactgcaaga ttgaaggata cccagacccc gaggttgtct ggtnncaaag atggaccagt 540
tcaatcaggg agtcccgcga ntttccagat agaytacgwt gaggacgggr acygytcttt 600
aattattagt gatgtttccg gggatgacna tgcc 634
```

<210> 28

<211> 1632

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (926)

<223> n equals a,t,g, or c

<400> 28

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ccccgcgcac ccccgccgc agcgcaggca gcccagcaga agttccacct ggtgccaagc 180
atcaacacca tgagtggcag tcaggagctg cagtggatgg tacagcctca tttcctgggg 240
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ggagtcattc gggccctggg gccgcctcca ggggtacgtc gaaggccttg tgaacagatc 360
agcccgaggg aagaggagcg ccgcccagta aggcgcgagc ggaacaagct ggctgcggcc 420
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atgaccacac cctccctaac tcctttcacc cccagcctgg tcttcaccta cccagcact 780
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cctgagcctt gtgcctcagc tcatcgcaag agtagcagca gcagcggaga cccatcctct 840
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actgcaaaaa aa 1632

```

<210> 29

<211> 2539

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (105)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (936)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (951)

<223> n equals a,t,g, or c

<400> 29

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ggcacacggt gaacagccca tccctggtct catcaattat tcccatcatt caacagatga 180
acggrttcca gactccatca tttctcgttg tgttcagggtg ctcccacgag acacagcctc 240
cctcagcact actccttcag aatcgccctg tgctcagggt acatctcgcc tctctacagc 300
ttcctgcccc acacaaaaag tccagtccag gtgcagcagc aaggagaaca ttctcagagc 360
cagwcacagt gctgtcgata tcaccaaggt ggctagaaga catcgcatgt ytccttttcc 420
tctgacatct atggacaaag cctttatcac agtcctggag atgactccgg tgcttgggac 480
agaaatcatc aattaccgag atggaatggg gcgagtcctt gctcaagatg tatatgcaa 540
agacaattta ccccccttc cagcatcagt aaaagatggc tatgctgtcc gagctgctga 600
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agtaatgcca ggacaagtca tgcgggttac aacagggtgct ccaataccct gcggtgctga 720
tgagtagta caagtggag ataccgaact tatcagggaa tcagatgatg gcactgaaga 780
acttgaagtg cgaattctgg tgcaagctcg gccaggccaa gatatcagac ccatcggcca 840

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attagtgtta ccagcattca tgtggaaatc aagagcaaag acaaaaataat gttaaacaat 2460
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tcattattta aaaaaaaaaa 2539

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<210> 30

<211> 494

<212> DNA

<213> Homo sapiens

<400> 30

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ttgaagctga gtttattgag aatggttttg ttacctgctg atagctatct ttttgtgttt 180
agttcttttt gacttctttg gcctctaatt ttttgacagt ggcacttaga tgacagtcag 240
caattgcaac agtgaatgaa atcacacagc ttgagttcaa ggtggaaaga gaaaaaaatc 300
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tcttgctctc gaccttaggg tgtaatgtgg ccctgctcct tgtatgggtg ataacttgtg 420
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ctctgcatcc ttac 494

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<210> 31

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 31

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tttaagatgg agctgtttta cctacttcat aagacagttg cgaggtgcca ttgattcttg 180
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<210> 32

<211> 337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (337)

<223> n equals a,t,g, or c

<400> 32

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tgattttctc cccaaggaag agaaggaaat ccctgctggt tacacagctg cgatgtcaga 180
cttcctctga aacatgcact gttgctgcct attagcataa cttcagtcct tcattctctc 240
ctgactgatt agtgatctgc aggcagttta aaaaacatac tttggagggg ccgggcgtgg 300
tggctcacgc ctataatccc agcactttgg gaggctn 337
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<210> 33

<211> 1742

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1576)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1621)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1724)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1733)

<223> n equals a,t,g, or c

<400> 33

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gcttgctgtc tctcagaatt gttttcttac cttttaatgt aatgacgagt gtgcttcagt 180
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aaccaacaga attttaactc tattaacttt tccaaatttt cctatgcttt tagttaacat 720
cattattgta tcctaattgcc actaggggag agagcttttg actctgttggt gttttatttg 780
aatgtgtgca taacagtaat gagatctgga aacacctatt ttttggggaa aaagggtttgt 840
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caacgtagtt gtwattagta gttctataaa gagaactgct tttaacatta ggggactggg 1560
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naawtaaagg aacactttct accyctgttt ccaggatttt tgaaacactt wtttttaaac 1680
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ta 1742
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<210> 34

<211> 1166

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (965)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1090)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1094)

<223> n equals a,t,g, or c

<400> 34

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taagggaaga caggattcaa ctttggaac ctccatatac agatgaaaat aaaaaagttg 180
gtttggcatt aaaggacctt gctaagcagt actctgacag actagaatgc tgtgaaaatg 240
aagtagaaaa ggtaatagaa gaaatacgtt gcaaggcaat tgagcgtgga acaggaaatg 300
acaattatag aacaacggga attgctacaa tcgagggtgtt tttaccacca agactaaaaa 360
aagataggaa aaacttgttg gagacccgat tgcacatcac tggcagagaa ctgagggtcca 420
aaatagctga aacctttgga cttcaagaaa attatatcaa aattgtcata aataagaagc 480
aactacaact agggaaaacc cttgaagaac aaggcgtggc tcacaatgtg aaagcgatgg 540
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agcaaatga ggccaaactc aaagaaaaac aaattcagag gaccaagaga ggactagaaa 660
tactggcaaa gagagcagca gagacagtgg tggatccaga aatgacaccg tacttagaca 720
tagctaacca gacaggcaga tcaatcagaa ttcccccatc agaaagaaaa gcccttatgt 780
tagctatggg atatcatgag aagggcagag ctttcctgaa aagaaaagaa tatggaatag 840
ccttgccatg tctgttgac gctgacaaat atttctgtga gtgttgaga ragctgctgg 900
acacagtgga taactacgcc gtcctccagc tggatatagt gtggtgttam ttccgcctgg 960
aacanctgga atgccttgat gatgcagaaa aaaaattaaa cttggscag aaatgcttta 1020
aaaattgtta cggagaaaaa cmtcagagac tgggccacat aaaagtatgt tcctgggaat 1080
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tcacattatn ggcncttga gtccatttct agcatttgtg tttattcctg ttaaagtatt 1140
tgaactactg ccagaagggtg gatttt 1166

<210> 35

<211> 1049

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<400> 35

gatgggtgcc cccggcngca ggaattcggc cagcaggntg gtgctggggc ttcttctcct 60
gaaggggctg caagagggaa ggcttagcca tgctgtcctt gatcagaagg gtgatcagca 120
ccgcgaaaagc cccagggggc attggaccct acagtcaagc tgtattagtc gacaggacca 180
tttacatttc aggacagata ggcatggacc cttcaagtgg acagcttgtg tcaggagggg 240
tagcagaaga agctaaacaa gctcttaaaa acatgggtga aattctgaaa gctgcaggct 300
gtgacttcac taacgtgggtg aaaacaactg ttcttctggc tgacataaat gacttcaata 360
ctgtcaatga aatctacaaa cagtatttca agagtaattt tcctgctaga gctgcttacc 420
aagtgtgtgc tttacccaaa ggcagccgaa ttgaaattga agcagtagct atccaaggac 480
cactgacaac ggcataccta taagtggggc cagtgtgtgt tagtctggaa ttgttaacat 540
tttaattttt acaattgatg taacatctta attaaccttt taattttcac aattgatgac 600
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tgaacatgaa tattagagaa ggaatccagt tactttttta aattacacct gtgtgcacct 720
gtattactga atataggaaa gagataccca ttacatagtt actcagtaaa caaaagagaa 780
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<210> 36

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<400> 36

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attgccagga ttttgcaggt tagattgtac tacagcactg cctttggctt gccagactct 120
ggagtcccca ctttttcac cgtttctcag gaaaacactt tgaccactt gaagctctga 180
gctactgctt cacagcttcc tggggtcagt ctccagccaa aaccatagat atcccaamwg 240
cagccaaacc acggctctgg gcgaaggaa gattagggtt actstaggtt tccacaccct 300
gatgctcctg gcctttaatt tgacaactct ggactgccag gttttcacag acngttggac 360
atggattcaa gattgggaat gtnangggat ggtttgcaa cagtgtttgc tttgagcagt 420
tttaaaattt ggccaggaga ttcattgtgag caagaaatgt tagataccag ttttttgggg 480
tcaaggggg                                     489
```

<210> 37

<211> 598

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<400> 37

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tttaaagctt caggttctgg ttcagaagtt tcctgggtct cattaaaata atgaggcact 120
cagaattggt ctaataaaaa taacgaccat ttctttctac tccagtctct ttcacaaact 180
tcttagtgaa aatgacaagt gaggcccttc agtaggggca ttttcagtgg agataatagc 240
ggcagacctg agaccttggg ctaggtagtt tattctcatt tctgaacaga tgatgaattt 300
tctcagatga ccctaagaaa ttgttttacc aaaaacaaag tgatctattt gctttgggag 360
gaactccctt ccttttggtt ctcttccctt ccccccttcc cctgcggttg tagagccgt 420
tctgtccggt cgtggttctg tccagccatg atccgggagt cctagcttgc taatggamca 480
cctgagatgt tccttatggc tcaaggctwa aattgaagggt gggaaccacc tgaagcctcc 540
gtggggaggc cttgsgggag gttwggccta aargcattag gaagatacta gcttnagg 598
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<210> 38

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (725)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<400> 38

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gtctttggga actcaaaaag ttatctgtgc attttcatcc ctccgtggcc ctttttgcaa 60
agaccatcct tcagggaaac tatattcagt attcagggga cccactgcag gatttcactc 120
taatgagatt tttggatcga tttgtatacc gaaatccaaa gcccataaaa ggcaaagaaa 180
acacagatag tggtgtgatg cagccgaaaa gaaaacattt tattaaggat attcgtcatc 240
ttcctgtgaa cagtaaggag ttccttgcaa aagaagaaag ccaaatacca gtggatgaag 300
tgtttttcca caggtattat aaaaaagtgt ctgttaaaga gaaacaaaaa cgggatgcag 360
atgaagaaag tatagaagac gtggatgatg aagaatttga agagctgatt gacacatttg 420
aagatgataa ctgtttcagc tctggaaaag atgatatgga ttttgctgga aacgtgaaaa 480
agagaacaaa aggagctaag gataacacat tagatgaaga ttcagaagggt agtgatgatg 540
aacttggtta cctggatgac gatgraagtt tctttaggga agtatggatg atggaagaat 600
ttgctggaag ttgatggaag atgggaggga acattycatg ggatgtgttt agatggatgg 660
aaagtggaga gtgtttccag aacttggaag ttccactccc aaagtccagt accaaggaaa 720
agccnagagn aaaagggtac cagtggattt ttggaccttg gc 762
```

<210> 39

<211> 1958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1885)

<223> n equals a,t,g, or c

<400> 39

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tcgagttttt tttttttttt ttctcgtgag cttaggccgc tggtttttgt gattttttgtc 60
tgattgcaat gtctggacgt ggtaagcaag gaggcaaagc tcgcgccaaa gcgaaatccc 120
gctcttctcg cgctgggtctc cagttcccgg tgggcccaggt gcaccgcctg ctccgtaaag 180
gcaactacgc agagcggggt ggggcaggcg cgccggtgta cctggcggcg gtgttagagt 240
acctgaccgc cgagatcctg gagctggccg gcaacgcggc tcgcgacaac aagaagactc 300
gcatcatccc gcgccacttg cagctggcca tccgcaacga cgaggagctc aacaaactgc 360
taggccgggt gaccattgct cagggcggcg tccttcctaa catccaggcc gtgcttctgc 420
ctaagaagac cgagagtcac cacaaggcca agggcaagtg atttgacagg tatctgagct 480
cccggaaaac ctatcaaacc caaaggctct tttcagagcc cccctaccgt ttcaaaggaa 540
gagctaacct cactgcttgt aggtagaagg aaaaaaggca ctaagggttg aaaagcttct 600
catttcagag agatgccagg atcctaagt cctgccaac ttaccaattc taaggaaataa 660
gtggatggat ggcattactg attcctacat tactgattga ttctgcatcc gcaaartgtt 720
ttattaaana cattctacat catgtgtggg gagataagga ggataaaatg aagagaaaga 780
atattattga ggggaagttc ttctgaatac aaaatgtgtt taatttttta aataagtatt 840
acattcacag ggttcaaact atttgaagta aagagattat atataaagaa tccatcccctc 900
aacttaccga ggtggtcact tttctttttc ttgtgtatct gcccagtatt cattcctgct 960
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gatatcagtc aataatgaat gatacgtgtt ttcttcactt ttttcattct tgtcaggtag 1020
cagactgtgt agacttttct gcacttgccc ttttcataac aatctatctt ggagaacttt 1080
ccctatgaga acatacagag cttcctgtac acagttgcat gtactgcatt atgcaaatgc 1140
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gttcttaaaa actatgtggc catcaccaaa ttagttatatt tgaaccttaa tttcttcacc 1380
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ctatgtgtaa tttcttaatt ttgaaataat tttatttgta atgtgcataa tcttatttaa 1560
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ataaaaggta atgcaaaggg araggaaagc atgtgtcatt aattttctgc ctaggacacc 1680
tccctgggta aattgccatt tcctttcttc cttgcataat gattaggaaa cacatcctcc 1740
tgacctgcct gccctctttt gcctactttt tcatctgcag tcaaggctctg gttttaagac 1800
tgactgttac ttttacaat ctgtgtgtat tggtnggcta agggcctgta tgggtccact 1860
gctgtattcc caggggccca gcatnggkgc ctggacgctg cckgggcaa tagtagtcac 1920
ccgaggaaat gggctggatg gaatttcacg gagggcct 1958
```

<210> 40

<211> 477

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (246)

<223> n equals a,t,g, or c

<400> 40

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gccangtet ccgcttnccc cgtcttgtac acccctaact cctgaggctc ctccgaatca 60
cgcganggaa agcggagaag ctcaagtggc cgccatgtca gaggcttatt tccgagtgga 120
gtcgggtgctg ctggggcctg aggagaactt tctttctttg gacgacatcc tgatgtccca 180
cgagaagctg ccggtgcgca cggagaccgc catgcctcgc cttgggcttt cttcctggag 240
cggagnaagg cgccgagact gacaacgcgg tcccacagac ttttatcgga cgttttcgcc 300
gcatcatgga ctctcaccag aatgcttaca acgaagacac ttcagccctg ggtagccagg 360
ctagacgaga tggagagggg cttattttcaa acagggcaga aaggactgaa tgactttcag 420
```

tggtgggaga aggggcaggc ttctcagatc acagcttcca acctcgttca gaattaa 477

<210> 41

<211> 860

<212> DNA

<213> Homo sapiens

<400> 41

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ggcgacgagc tcgtgccgaa tcggcactag tggaggatgg gcttctcagag ggttctctgc 60
ttactaact cccgagagaa ctcccacagg ctcttcctgc tggtgcaagc ttttgggggt 120
gtggacgtgg ctgagttctc ctgcgcgtac gggcctggcc agaggaggat gatcctgaag 180
cagtttgaac aggggaagat ccagctgctc atcagcacgg acgccaccgc gcgaggcwtc 240
gacgtgcagg gtgtggagct ggtggtgaac tacgacgccc ccagtacct gagaacctac 300
gtgcaccggg ttgggaggac agctcgcgct gggaaaactg gacaggcctt cacactgctc 360
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cagcggcacg agctctccag caagctgctg cagccgctgg ttctcggta cgaggaggcc 480
ctgtcccagc tggaggagtc tgtcaaggaa gagcrcaagc agaggcgggc ctargctggg 540
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gatcactgga tcctgtatgt gaggaaagga atccccagc ggacacagcc ttctcccca 660
agcacgtggt ctctgcgcca ggcagcccgg gcgtcagagc tcaagcacct gccccgactg 720
gagacttcag ggcttgtcac ttctcagagt tggaggctcag gatggctgcg ggcaatgaag 780
ccttagtaaa acggtgaaaa gtactcccag acggacgcgg gcacccgtca tgcttttgct 840
gagagttggg ggcattaacc
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<210> 42

<211> 1131

<212> DNA

<213> Homo sapiens

<400> 42

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gaaccttacc ttcaaggagc aagtgaagaa ctctgtgaag gatggaactt tcagatatca 120
actattttaga gtccagaggg agccatggca ctagaaatag ttgataatga aatgagattt 180
tatgaagtat accgctccac ctatgagcgt ctgtctctgt gggcttgggg tgtaaacagg 240
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gcttcttaat tcaagagaca aaccaagacg ttctgtcaac tgtgctgtgc tcttctttaa 360
gccaatgaac cccaattcct ggcagtctac aagaagtctc ttaatgctaa tgaagaattt 420
aaagggtctt ttaaggaaat gaagggtctt ccaaatagaa tgatttactc tgaagaaaca 480
aacaatggta tctctgaaac tcacaacctc aagcccaatc ttgaaaatat gttgtgcacc 540
aagacgactg cttcagcttc ttctcttatc cttactttct ttaatagata ttatttaaac 600
tgtccagtga aaaggtgcca caatgcccag tattgtaaac aacagggttg cattcatgaa 660
gctttcattc attctggagt ctactaattt acctgaatgg tgtttgcatt ctgtgaaatg 720
cctctccacg ttgcatatgt cacacttttg tctgcacata actctttttt cacaagaagg 780
gtcactgcca caacagcaca gtcagcgggt gaattacagg tgccctgctgc ctgcctacct 840
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atgtcagtga ccagatttgt ggcttataaa cattagcagt ttatttatgt ttaagatgc 960
aaagatgtgt gtttgatatt cactttaata attagaaatg gatcttgtaa acagggcata 1020
tatcaaagat gaccttataa tatgtacccg aatatacagt tcaagaattt tgtctgactg 1080
gaaataaatg cattttgtag caaaaaaaaa aaaaaaaaaa a 1131
```

<210> 43

<211> 1334

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1019)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1204)

<223> n equals a,t,g, or c

<400> 43

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acgaggsaac tagttctctc tctctctctc catgaccccc cagcttctcc tggcccttgt 60
cctctggggc agctgcccgc cctgcagtgg aaggaaaggg cccccagcag ctctgacact 120
gccccgggtg caatgccgag cctctcggtg cccgatcgcc gtggattgct cctggaccct 180
gccgcctgct ccaaactcca ccagccccgt gtcttctcatt gccacgtaca ggctcggcat 240
ggctgccccg ggccacagct ggccctgcct gcagcagacg ccaacgtcca ccagctgcac 300
catcacggat gtccagctgt tctccatggc tccctacgtg ctcaatgtca ccgccgtcca 360
cccctggggc tccagcagca gcttcgtgcc ttccataaca gagcacatca tcaagcccga 420
ccctccagaa ggcgtgcgcc taagccccct cgctgagcgc castagcagg tgcagtggga 480
gcctcccggg tcttgccctt tcccagagat cttctcactg aagtactgga tccgttacia 540
gcgtcaggga gctgcgcgct tccaccgggt ggggccatt gaagccacgt ccttcacctt 600
cagggtgtg cggccccgag ccaggtacta cgtccaagtg gcggctcagg acctcacaga 660
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gcaagggtt cccgctgcct ccagacagca cctgggtcct cgccacccta agccccggga 780
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agcttraggc caggagctyg aaaccagtcg gggccacaca gcaagacccc atytctaaaa 1140
aattaatata aatataaaat aaaaaaacgc ccatagtcat acaaagcccc cgcaccaata 1200
ggancctccc gaatcaacct tgaccctctt ctttcataac ctaacctgac tagaaaagct 1260
attacctaaa acaatttcac agcaccaa atccacctcc atcatcacct caacccaaaa 1320
aggcataatt aaac                                     1334
```

<210> 44

<211> 2351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1106)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2324)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2350)

<223> n equals a,t,g, or c

<400> 44

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gaacatttgg ggcaggggggt aaattttgcc agtttgagca tcatgagggtg taacaagaaa 60
tggggttgaat gggccaaatg caaggagtgc atctctgggc tgcaaactga cttgagtgtc 120
gcactattgc tattccgtgc aaacaaaact cagcttttcc tgactcagtt ccttgactta 180
gtggccttta caaaaaaagt tgagtagtgt gtggcctgct gtcgcacagc ccctagttag 240
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cttcccttgg tccagacagc tgggagtggg ttaggccac tgctgttttg agcagggcca 360
cttgctccat ttcactgaag gctttgctgg gtgaaaacac ttcagcatct cctcctcagg 420
tcaaccata aagaccaggt ccagcacctg ggtcttggca catccctggc ctcaggccct 480
cacctaacag tgaggcagca gctgccagc cccgcaatgt gcctgctgtc aggcagctct 540
tgcttgaac ttacttccac attctttcct gatgggcagg tggctgaagg cccagccatc 600
agtgtcgctt gttgccaccc cgtgcctccc ttggcctctc tgagctttgc ccagaagacc 660
aacaatcata cataccctaa ctgggacacc actctgcaga atgcagatga tccattctgg 720
aggaagctgt cccttgagct cagtgcagtc ccaggcaagc agggcatctg gccgacttcc 780
ctcacaacag ctgctccac atccctcgg actggagctt cagccctgac tgagggtggg 840
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cagggccaga gcataccacg tctgcagtgc ctgtgagcag agccagcagt tgccctgtga 960
ctgtaaccac caattgtcc aaacacccgc tgcaattagc aagaagggtg ggcttcaccc 1020
tcctttactg aggagaatga tgcggaggag ttctctctcc agggctaggc aaggcaggcg 1080
agcagccaga agccgggtgc ccacanggca gggacaggaa ggctgtgctg ctactggctg 1140
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tctcgctgct ttcacagctg caacgattgt gtctgcctca tgggggtttc ctccagagcc 1260
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ggtattctaa cgtttcctct ctgtatttca tgaagctgat ttctctctc tttccttttc 1500
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agaaagcctc tccagagaag tttggtttct ttgctgcaag aggaatgagg ctctgtaacc 1800
ttatctaaga acttggaagc cgtcagccaa gtcgccacat ttctctgcaa aatgtcatag 1860
cttatataaa tgtacagtat tcaattgtaa tgcattgcctt cgggtgtaag tagccagatc 1920
cctctccagt gacattggaa catgctactt tttaattggc cctgtacagt ttgcttattt 1980
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ttcagttatt ttctgagtgt gcagacagct atttcgcact gtattaaatg taacttattt 2100
aatgaaatca gaagcagtag acagatgttg gtgcaatata aatattgtga tgcatttatc 2160
ttaataaaat gctaaatgtc aatttatcac tgcgcagtgt tgactttaga ctgtaaatag 2220
```

```
agatcagttt gtttctttct gtgctggtta caatgagcgt cgcacagaca tggtttcagg 2280
taaataaatc tattctatga taaaaaaaaa aaaaaaaaaa gggnggcccc nctaaggggg 2340
ccaagcttan g 2351
```

<210> 45
<211> 1587
<212> DNA
<213> Homo sapiens

```
<400> 45
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tattttttttg tagagatggg gttgtccagg ctggtctcaa actcctgagc tcaagcaatg 180
tgcccgccctt ggcttcccaa agtgctggga ttataggcgt aaaccactgc acgcagccta 240
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tcctgcgaag gaaattccag agcctgtatt taagctacct aggcttttac actcccttta 360
ttgcctttcc aaatagtatc tcatttggtg tactctagtg tcctatacct cttggaaacg 420
aaagaggggc caacctacaa ctaagaaggg acaaaccttg aactaagtaa gaccttacac 480
acccagaaag aacctgggc cctccttctt cagggacaat gcagtagcca cttggcctgt 540
ggaatttact gaaggctatt tcctgtaact tgctagttaa cttagttttg tatttcaggc 600
agaggtgcgc tctgtaatgt tgggcctttg acttcacagt actggagagc tgttcacaca 660
gatgtttaga cctttctctc tctctctctc tcttttcttc tttctcaaca actctttcac 720
agaggcagtc attttgaaag gttgaaatat ttggccttta ccaaagagct ttttttttcc 780
ttaagcaaaa tcctttcaga aagaaacaaa tggggaaggg cagattaaga atgcatatgt 840
cccaatccac ttctatagga gtttaatcat attcacatga gtaaaatgat ggaagaactc 900
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cagcagattt gtaatatatg tctggagagc tatttataag aaatttaaga ggattgtttt 1020
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tcccccttta gtcattgatt tctatttggt ttttaatggt aattthtcta gaaagcatct 1320
gaattgacta ggctthtctt atataaaaaa ctcaaaactt gtttaactctg tactthtaata 1380
aaatttaaaa ttaaaactgt gttgtthttt tctcttctgc tagatacata tataattaaa 1440
gtactcaagt tagttgttht gcagagatgt tgcttcaga tgttaatcag gtctctcaag 1500
tttcatggag tctatgctga tcctthtaatt gacaaataaa agatatatat ctgtggtgtg 1560
caaaaaaaca aaaaaaaaaa aaaaaaa 1587
```

<210> 46
<211> 379
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)

<223> n equals a,t,g, or c

<400> 46

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aattcggcac gagaatcact ggggtggett ccccatgctg ttctcttgat agtgagttct 60
catgagatct gatggctttg taagtgtttg gtagtttttc ctgtattcat tctccctcct 120
gccaccttgt gaagaagggtg ccttggttcc cctttacctt caacccatgac tgtaaatttc 180
ctgaggcccc cccagccatg ggggactgtg agtcaattaa acctctttcc ttataaaatt 240
accagttctc gggcagtttt cttatagcag tatgagaatg gacttaataa aggtagggtt 300
aaaaagtatg gctkgggcat ttagctcaa cacctgtagg tcaanagcta nctttgggtg 360
ggctgaggca ggagggacg 379
```

<210> 47

<211> 1920

<212> DNA

<213> Homo sapiens

<400> 47

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catcatcgta tcaattgtgt tcatctatat cattgtttca cctctctgtg gtggatttac 60
atggccaagc tgtgtgaaga aataggaaag aagaagttac cattaaccaa ggatatgaga 120
gaacaaggag ttaaaagcaa tccatgtgac tcaagccttt cacatactga cagatggtat 180
ctgccagtct cttcaaccct cttctcactt tttaaaatct tgttccatgc ctccagggtt 240
atctttgtct tatctaccag tttattcctg tgaacttcag attgaaccat tcattgcagc 300
agtagcctta aaaaggcttt tgtttatttc tttggtttgt taactagtgt catctattta 360
gagaaacatt tttgttttta attgctcaaa gctgtcgccg ctagtcttat gagctatcta 420
ctaaaactat ggagaaactt tgtatgtgca cacaaaagta ttcaagagac agtattgcta 480
acatctcatc ttaatgtctt ttgttattga gaagttttag gtgcttcaaa acaatataaa 540
tggaataatg ttgttatttg gggaattgta atgatgttgg tgctgcttcc ttctaagagc 600
tcagacaagt aaagtatgaa acattcttat ttcagttaga tggggaacat tttgctagcc 660
cattagaagc acacagaatt atccttgtcc tctaataatt gactttcagg aataaagttc 720
agtgtgctga tcattcacaa tacagtggat agcttgatat cttctgtttt cccattgcag 780
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gtggggaggt aaattcctct gacttgccaa agaaaaagaa ggggaaccaca gtggatatgc 960
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tagttttgag cattctttgt ggttaaataa attcttaaat ctgcctagtt ttgatgaatt 1140
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tgttatctag tatgcatttc tgggtgtgtat ctgaaaggaa gacattttct accctagatc 1320
caattgcatt tatttatcaa taagtgccat taaattgaaa ttatattaca ttttacactt 1380
tctcaatgaa tgaacaaatt agtctgtaga atctagccac ctgtttagcc tagtcatgtg 1440
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ttcttgttta tctagcatag cacaaacggt tttccagtct tctttatcaa cactaatgcc 1620
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ttcctgaata atttccaaat gtttttaatc caaagaaaaa ggtttaaagc ttatttccct 1740
ttcttataca cacctgaata aaattgatgt gcatgtttta gggatcaatt acctaaactgt 1800
tccttggctc atttatgtat aagaatgctt tttaaagcac atgtctcatt ttaaatagacg 1860
cacaaactga agatgttaat aaaatttaag agtaatacaa aaaaaaaaaa aaaaaaaaaa 1920
```

<210> 48

<211> 319

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (306)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (317)

<223> n equals a,t,g, or c

<400> 48

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ggcacgagcc agaacaaaa gtacaatagc tgttgctcaa ttgctagtca aataacttag 60
cactggggaa ttccmgatgt tacttaggga attttatact ggtgcatctc aataaagaac 120
tgaaagtaag cacaagaaga aaaaaagcct tatctttgct ctagattttg caaaggggaa 180
atttcaacag aacgcaatca ttgctacacg tctgccaaga cacaaggctt gggcgatctt 240
ttttgttca tttgttttgg atacttagct agtttttctt aaatgtatac cattggaggg 300
ggatanctgg gccttttngg                                     319
```

<210> 49

<211> 278

<212> DNA

<213> Homo sapiens

<400> 49

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gacggatgaa gagatcgcgg cgggtggagcc gttacaaagc gttgaacgcc ggacgtacca 60
gtaagcgtat tcataaaggc ctggtggtgc gtaaaggctg gctgggtaaa ctgccttcat 120
taccgcttcg ctggcgggcg cgtggagtga tgaccctrat gtttatcttg ctggcggcca 180
tgctttggtt tgttgctgcc ccggtggtga cgtatatcct ctgtgcgtta gtggtattgt 240
tggcagcgcc tgttttgaat ggcagattgt acgcccgt                                     278
```

<210> 50

<211> 652

<212> DNA

<213> Homo sapiens

<400> 50

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ctttctcacc actctcctgc tagccatctc tttggcacta aggccctggt caaattggat 60
ttctttcatt ttccacact tcaaagacct atgttctagg tattctccat agggatagtc 120
tctttggcat ttatttggtt tttctacggt ttcagtccca tttactccaa gactcactcc 180
ctgccacctt gtgcatcaga tacagctact tctggctgac ttttcaaggg ggaccacctt 240
acctgtcatc tcttacttgt tcagaaatga ctgtgtcagt ggcacctcaa actcccttgc 300
tgtccttttc caaggagaca gctaagggtg atggagatgc agaattggacc tcacgttcgc 360
cctagtcaag actgataccc tttccgtttc agaggattgc caagaaaaaa ctcacagtgtg 420
aggcagggtg ctctgaggtc ggctgcggtg tgggaggcac gsctgggcmr gctctctggg 480
ctggagcagg tggattcgaa ggctgtgcta gcacgagggc ccaaaggctt tctcagtggc 540
cagtagctct gccgcctttc ccagagaggg ggtccagggg acatcctgga aggctggggc 600
ctgggccacc ttctgtctctt gcaagctaga gccagcccaa tagggggcgg at                                     652
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<210> 51
<211> 943
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (786)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (843)
<223> n equals a,t,g, or c

<400> 51
gctttgcaac agatcgcttc ttcaaatgct ggcacaacgc ccagagctcg atgagagAAC 60
agcccatctt caccaccga gcgcatgtct tccagattga cccaacacc aagaagaact 120
ggatgcctgc gagcaagcan gcggtcaccg ttctctactt ctatgatgtc acaaggaaca 180
gctatcggat catcagtgtg gacggagcca aggtgatcat aaacagcaca atcacaccga 240
atatgacctt caccaaaacg tcacagaagt ttgggcagtg ggccgacagc agagccaaca 300
cagtgttttg tttggggttt tcctctgagc agcagctgac aaagtttgca gagaaattcc 360
aggaggtgaa agaagctgcc aagatagcca aagacaagac gcaggagaaa atcgagacct 420
caagtaatca ttcccaagca tccagtgtca acgrgacgga cgatgaaaag gcctctcacg 480
ccggtccagc caacacacac ctgaagtctg agaatgacaa gctgaagatt gccttgacgc 540
agagcgcacc aacgtgaaga agtgggagat cgagctgcag acccttcggg agagcaatgc 600
acggctgacc acagcactgc aggagtcggc agccagtgtg gagcagtgga agaggcagtt 660
ctccatctgc cgtgatgaga atgaccggct ccgcaacaag attgatgagc tgggaagaac 720
aatgcagtga gatcaacaga gagaaggaga agaacacgca gctgraagag gaggatcgag 780
gagctnggag gcagagctcc gagaaaagga gacagagctg gaaagatctt ccggaaaaca 840
aantggaatc mtacytscag ctctgttca gattgcggat tttgtctctt gagaagctag 900
aggcgggcag agagagacat tcaaaacttg gaagacaaat gcg 943

<210> 52
<211> 832
<212> DNA
<213> Homo sapiens

<400> 52
gcgtcgacat agaattgaag ttgctcgtca gctgattgaa gataaggaga ttggcctgga 60
ttatccaggt aggtcaatg taatcaggaa gggcctttaa agtgagagag ggagsgagaa 120
gaggaagtca gagcgatgtg ctgtgaaatc tactaccgtt tgctgggttt gaaaatggag 180
aaaaagagtg aggaactgag aaacatggat ggccttgagg acgtggaaaa gggtcactga 240
aatgggacga catgaactca aggaggctat ttatgaccat gtcatttgca acatgaagaa 300
agcttatctg gagtgaaagt aaatgagacc aacagagatr agagaccggg agaaatcctg 360

```

gttacctgctg ttgaatcctg tcagtcctat actggagtcg tgtaataca aaataatagt 420
aataatccct ctgtttctta tgtttatgcc aacttcaaca aaaagaaact tgactaagag 480
acaatataag aayttaatgt gtaattaaga aagaactctc caccacgggg aatgtgaaag 540
gtatatgagt cccttttcac gatgcatgt catgtctttt aaataagcca tactttatgt 600
tcaataaaaa gagaataagc aggattcgcm agagaacaca atcccttttt aactgctggg 660
aagatacytt tagtcattaa tgrctggacg acaatttggg rcacmtatat ggatattggc 720
cggtttgtga tgatgtgatt gggcctctaa gtgacaacat tgttccctgt atagagtga 780
tggcaagtgc atttataaaa ttggccatca tggctgttaa atttaaaaaa aa 832

```

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<210> 53
<211> 1554
<212> DNA
<213> Homo sapiens

```

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<400> 53
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gagttttggg aagtgaagag aaaagaaaag ttgattacaa acgggaccat attttgcttc 180
gaaatggaac cagcagttag cgagccaatg agagaccaag tcgcacggac tcatttgaca 240
gaggacactc ccaaagtga tgetgacata gaaaagggtta accmgaatca ggccmagaga 300
tgcacagtga tcggtggctc tggattcctg gggcagcaca tgggtggagca gttgctggca 360
agaggatatg ctgtcaatgt atttgatatc cagcaagggt ttgataatcc ccagggtgcg 420
ttctttcttg gtgacctctg cagccgacag gatctgtacc cagctctgaa aggtgtaaac 480
acagttttcc actgtgcgct acccccacca tccagtaaca acaaggagct cttttataga 540
gtgaattaca ttggcaccaa gaatgtcatt gaaacttgca aagaggctgg ggttcagaaa 600
ctcattttta ccagcagtgc cagtgtcatc tttgagggcg tcgatatcaa gaatggaact 660
gaagaccttc cctatgccat gaaacccatt gactactaca cagagactaa gatcttacag 720
gagagggcag ttctgggcgc caacgatcct gagaagaatt tcttaaccac agccatccgc 780
cctcatggca ttttcggccc aagggaccgc cagtgggtac ccacctcat cgaggcagcc 840
aggaacggca agatgaagtt cgtgattgga aatgggaaga acttgggtga cttcaccttt 900
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tactctttcc gtgacgatga gggcggaaca aacagacatt tcttccttca tggaaactgga 1500
tttggaattt ttgaagcagg cagcttcata ttataccgat ttgttctctg tcaa 1554

```

```

<210> 54
<211> 281
<212> DNA
<213> Homo sapiens

```

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<400> 54
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atgcttcctg gaattacgtc atttatactt tataaatcta taatgtgtam tgaatataaa 120
acaagcttgg gaaacataaa ctcaagttag aaaatatggg ttgacataa aaccttaaat 180

```

atgtttcatt tgtttgcttg tttggcttgt ttgtttctaa cacaagttta acctacatgt 240
gagtcacctt tgggattgat gagtctagrg tttgaaacca g 281

<210> 55

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (770)

<223> n equals a,t,g, or c

<400> 55

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cgtggatttg tgagaggggc catggttggg gggatgcagg agagggagcc agccctgact 120
gtcaagctga ggctcttttc cccccaaccc agcaccaccag ccagacagag gagctgggct 180
cttttctgtc tctcccagcc ccaactccaag cccatrcccc cagccctcc atattgcaac 240
agtcctcact cccacaccag gtccccgctc cctcccactt acscagarc tttctcccca 300
ttgcccagcc aactccctgc tcccagctgc tttactaaag ggggaagtcc tgggcatctc 360
cgtgtttctc tttgtggggc tcaaaacctc caaggacctc tctcaatgcc attggttcct 420
tggaccgtat cactgggtcca cctcctgagc ccctcaatcc tatcacagtc tactgacttt 480
tcccattcag ctgtgagtgt ccaaccctat ccagagagacc ttgatgcttg gcctcccaat 540
cttgccctag gatacccaga tgccaaccag acacctcctt cttcctagcc aggctatctg 600
gcctgagaca acaaatgggt cctcagctc ggcaatggga ctctgagaac tcctcattcc 660
ytgactctta gcccagact cttcattcag tggccacat tttccttagg aaaaacatga 720
gcatccccag ccacaactgc cagctctctg attccccaaa tctgcatccn tcttcaaaac 780
ctaaaaaaaa aagaaaaaaaa aagtcga 807

<210> 56

<211> 656

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (545)

<223> n equals a,t,g, or c

<400> 56

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gctgttggtc tgccaagtat tctgtttcat ccaattggat actatgcatg cacagaagct 120
cctagwaaaa atgggtggct cagcaccacc agatagcagc tggagaggaa gtctcaaagt 180
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agtggaaacca gacagatatg tcattctggg aggtcaccgg gactcatggg tgtytggtgg 360
tattgaccct cagagtggag cagctgttgt tcatgaaatt gtgaggagct ttggaacact 420
gaaaaaggaa ggggtggagac ctagaagaac aattttgttt gcaagctggg atgcagaaga 480
atgttggtctt cttggttcta ctgagtgggc agaggrgrat tcaagactcc ttcaagagcg 540
tggcntgggc tttatattaa atgctgactc atctatagga aggaaactac actctgagga 600
gttggtattg acaccgcttg atgtacagct tgggtacacaa ccttaccaaa gagctg 656

<210> 57
<211> 794
<212> DNA
<213> Homo sapiens

<400> 57
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agacccccgc gcccgggccc gcccgggaga agagcgccgg caagaggggc ccggaccgcg 120
gcagccccga gtaccggcag cggcgcgagc gcaacaacat cgccgtgcgc aagagccgcg 180
acaaggccaa gcggcgcaac caggagatgc agcagaagtt ggtggagctg tcggctgaga 240
acgagaagct gcaccagcgc gtggagcagc tcacgcggga cctggccggc ctccggcagt 300
tcttcaagca gctgcccagc ccgcccttcc tgccggccgc cgggacagca gactgccggt 360
aacgcgcggc cggggcgagg gagactcagc aacgacccat acctcagacc cgacggcccc 420
gagcggagcg cgccctgccc tggcgcgagc agagccggcg ggtgcccgtc gcagtttctt 480
gggacatagg agcgaaaaga agctacagcc tggacttacc accactaaac tgcgagagaa 540
gctaaacgtg tttattttcc cttaaattat ttttgtaatg gtagcttttt ctacatctta 600
ctcctgttga tgcagctaag gtacatttgt aaaaagaaaa aaaaccagac ttttcagaca 660
aaccctttgt attgtagata agaggaaaag actgagcatg ctcacttttt tatattaatt 720
tttacagtat ttgtaagaat aaagcagcat ttgaaatcgc aaaaaaaaaa aaaaaaaaaa 780
aaaaaaaaaa aaaa 794

<210> 58
<211> 1155
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c

<400> 58
aaaaagccag aagatgaaat tgctagttca aagttgttgg attgctagtc atgtcatgag 60
gatcagaagg ttgagatttt tgtagaagct tagaccagtg tgatagtagt gattggatca 120
agacgtttgc aaaanggact aggtcatag taacttcgcc tgataaacia cttgatgcag 180
atgtttcccc caagcccact attttcttcc ttcraattgct gaaacaaarc tccagaaggc 240
tggaacatac ctttgtcttc ttgagaaatt tttcccwgat rttattaaga tacattggsa 300
agaaaagaag agcaacacga ttctgggatc ccaggagggg gaacaccatg gaagactaac 360
gacacataca tgaaatttag ctggttaacg gtgccagaaa agtcactgga caaagaacac 420
agatgtatcg tncagacatg agnaataata aaaacggrgt tgatcaagaa attatctttc 480

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ctccaataaa gacagatgtc atcacaatgg atcccaaaga caattgttca aaagatgcaa 540
atgatacact actgctgcag ctacaaaaca cctctgcata ttacatgtac ctctcctgc 600
tcctcaagag tgtggtctat ttggccatca tcacctgctg tctgcttaga agaacggctt 660
tctgctgcaa tggagagaaa tcataacaga cggtaggcaca aggaggccat cttttcctca 720
tcggttattg tccctagaag cgtcttctga ggatctagtt gggctttctt tctggggttg 780
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agtgggcaca cagagaacct cactctgtaa taacaatgag gaatagccac ggcgatctcc 900
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agtgtagaca tcctgcggct tctagccttg tccctctctt agtggttctt aatcagataa 1020
ctgcctggaa gcctttcatt ttacacgccc tgaagcagtc ttctttgcta gttgaattat 1080
gtggtgtgtt tttccgtaat aagcaaaata aatttaaaaa aatgaaaarw aaamaaaaaa 1140
aaaaaaaaaa aaaaaa 1155
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<210> 59

<211> 492

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (201)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (454)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (467)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<400> 59

```
ggcacgagtg caggggtcaa cccttataaa tgcagtcaat gtgagaaatc cttcagtggg 60
aaattacgcc ttcttgtaca ccagagaatg cacacaagag agaaaccata tgaatgcagt 120
gagtgtggaa aagccttcat taggaattct caactcattg tacatcaaag aactcattca 180
ggagagaaac cctatgggtg ncaatgaatg tgggaaaacc ttctctcaaa aatcaattct 240
cagtrcacat cagagaacac atacaggaga gaagccttgt aagtgcactg aatgtgggaa 300
agccttttgt tggaagtcac agctcattat gcatcagaga actcatgtag rtgacaaaca 360
ttgataattt tacgaaactc tgaaaagtgg attcacaaga gatagaaaca atcatatata 420
aagagaaact ctgtaatggg aatcatcttg tccntcttcc agaaaantca tantgaatag 480
aaactttatg ga 492
```

<210> 60

<211> 1617

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1590)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1592)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1617)

<223> n equals a,t,g, or c

<400> 60

```
ggaggccctg cgagaggact gtgcggccca ggcacagcgg gcacagcggg cccaacagwt 60
gctgcagctg caggtgttcc agctgcacag gagaagcggc aattgcagga cgacttcgca 120
cagctgctgc aggagcgcga acagctggag cggcgtgctg ccaccttga gcgggacagc 180
gggagctcgg gccgaggctt gaggagacca agtgggaggt gtgccagaaa tcaggcgaga 240
tctccctgct gaagcagcag ctgaaaagat ctcaggcaga gctggtgcag aagggcagcg 300
agctggtggc tctgcgggtg gcgctgcggg agggccgtgc tacgctgcgg gtcagtgagg 360
gccgtgcgcg ggggtctacag gagggccccc gagctcggga gctggagctg gaagcctgtt 420
cccaggagct gcagcgacac cgccagggaag ctgagcagct gcgggagaaa gctgggcagt 480
tgatgctga ggcggccgga ctccgggagc cccctgtgcc acctgccacc gctgacctat 540
tcctcctggc agagagtgat gaggccaaag tgcagcgggc agcagccggg gttgggggca 600
gcttgccggc ccaggtggag cgattgcggg tggagctgca gcgggagcgg cggcgggggtg 660
aggagcagcg ggacagcttt gaggggggagc ggctggcctg gcaggcagag aaggagcagg 720
tgatccgcta ccagaagcag ctgcagcaca actacatcca gatgtaccg cgcaaccggc 780
agctagagca ggagctgcag cagctcagcc tggagctgga ggcccgggag ctgctgacc 840
tgggcctggc cgagcagccc cctgcatctg cctggaggag atcactgcta ctgagatcta 900
gggcccctag caaccagctc tgtagggagc tctgccagag gggcagcagc tgcagatcca 960
cttaggcccc aggggtccacg gatggcccca aaggctgagg gccccaaagc cacttgtctc 1020
ctaggatcca ggccctctggg cttctgccaa gaactcaggg tggccctatg acttgaggga 1080
gcaagatcag accgctcaaa ggtccccgtg ttcactgtta cccagaggct cttgttacta 1140
cccacttcat tccccaccgc tgccagtgcc actgccaacc ctgttcacag gcgcttccag 1200
cccactccag ccaggggagc agggagaag aaggggctcc ctctcttca cattcccccc 1260
gaccccaaag ccagagaaaag ccagatggca ccagctgctc cgatgtgcc tgcccacatt 1320
gggggacagg gccgggcctg ggctcgggtc ccaggtttga gctctgcagc ctctctcctg 1380
gagtgaaggg gctgaagtca gaccaaagga agaactcaga aatgtcttgt ttatttgtgt 1440
ttgtgaccaa gcagcctctc ccttcaccca ggtttatggc ctcgttttca cttgtatatt 1500
tttcacactg taaatttctt gtacaaaacc aaagaaaaaa ttaaaaaaaa tttttttgtt 1560
taaaaaaaaa aaaaaaaaaa aaaaaaaaaa cncngggggg ggcccgggtac ccaattn 1617
```

<210> 61

<211> 1653

<212> DNA

<213> Homo sapiens

<400> 61

```
aaatatgaga attttaaagt aatatattga tyaaagatca ctgatgatat agatataata 60
tatcataaca gaaggaaagt aaatggactt gagcttaact tctcaccctg gaattattag 120
tggtgaaga ggggaatcat tagcattctg ggcgttttta tattaatgt tttgtgaata 180
tgccagaaga tctgccttca acttgtaatt aggcaagata gtaaygcttg atggtaactt 240
ctatgtttgt gtagaaataa taccagttag ttttggaag ccattcagat ccattcaaaa 300
attccataaa gtatgatgta tgctttggaa gagggatatg agtgatacaa ttgttatata 360
aatggaatag acaaaccatt tgaatgcatt tttctagggc aaacattttt tgagattttt 420
gagttaagaa gatttttcgg cttgagcaga agatgtgttt gttttgcatt tttcagctcc 480
aaggaaatag ccccatggc tttaaaaggc cctgaagttc agatagtagt aggtagtgtt 540
ttgttattgt tttaatttga gagttgcagg aataatgggc agagctgtca tttgccggta 600
ckaccatctg cctacataga attattggac tgtaagctaa aacagactgt aaaagaccta 660
cttgctaaag cattgcttat tcagtggat tcagtagata agatctattt cctgatatat 720
tgtgctcaag ttatttgcac atcttaagaa acttttaata tctaaaacca ttgttgtaag 780
atthaggtag aggaggtttc cttttgtgtg atgcataata atagaaaaca ctgatacagt 840
gtttactatg tgccaagcaa gcatatgata actaattctt aacaactcta tgaggcaggg 900
tcattttatta tctgtgtgtc atatgaggaa atctcgccag agagaagtta attaacctgc 960
ccaaggtcgt atagttagta aagtggatcat gcttggtatt taacctaggc agattacttc 1020
agagtcagcg tctgccttac tatcctgttt cctgagcagg aatttcccct tgtgtcaggc 1080
aacactaggt gttaggagtg gaggtgtgca gatgttgctt tacattctgt tttcctgatg 1140
tggtgtgctt cctaagagta caaacctgag catatgtcca ggcttgcaaa gtctcaggca 1200
aagctgggac taaggcttgt gtttcctgcc ttgggtagga ttttcttcta tgcattgttg 1260
gtgcttctca cttaacctaa tagtatgcct tgtctgtttt ccccccttcc ctttttgtt 1320
taaattgatt cacagaacac aaaaatttac taggtatgaa catttgaaaa aatggaatag 1380
agaaaaatggt acatcacatg taataaagat aaatatgtt ttgtgaaatg tctttttcaa 1440
tcataaatat gtgttgtgtg ctatataaaa ctatttctta ttgtggatat tgaagtttga 1500
agcctgttgt tcatctatag atgcactgga tgggattgga agtcttcaga tttcagtagg 1560
gtttccaca agcttatgaa gacattgttc tgtttaggct gtaaaactgtt tttatttctt 1620
gatgaaaaat gttcttctat ttatatgata cca 1653
```

<210> 62

<211> 440

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 62

```
gaattcggca gaggaataaa taatttatta tatggtaaag gtggcatttc aaatcaatgg 60
gaaaaggtag gtttattgac aaaggatttg aagcaacggg ttaagatttg gaaaataact 120
atctctgctc ccaaaccattc accatatgag actgtagacc taataaaaat aaacataaga 180
ttatgagaat aaaatatcaa taaatatattt atactatctt gcagtgggat aggaattgtc 240
tcactcctgc tggggtgact ccccatgaac ccaggggctc ttcagttcca aagrggaaaa 300
aggggaacag atggcctcct ccccttcctc actccctcctg gaccaggat tgctccctga 360
aggttttcga gccaccctcc ttcccatctc tcctgggggg ccaaggangn ttaaacagca 420
gggcccttcc nggtgtgccc                                     440
```

<210> 63

<211> 1062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (948)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (974)

<223> n equals a,t,g, or c

<400> 63

```
aattcggcac gagggaaacct tgaaccagcc rctgaccaa ttggatagat cttctgaaga 60
gcctttggga gttctggtaa atcccaacat gtaccagtcc cctccccagt gggttgacca 120
cacaggtagc gcctcacaga agaaggcttt ccgttcttca ggatttggac tagagttcaa 180
ctcatctcag caccagttgc gaatccagga tcaagaattt caggaaggct ttgatggtgg 240
ctggtgcctc tctgtacatc agccctgggs ttctctgctt gtcagaggga ttaaaagggt 300
ggagggcaga tcctggtaca cccccacag aggacgactt tggatagcag ccacagctaa 360
aaaaccctcc cctcaagaag tctcagaact ccaggctaca tatcgtcttc ttcgtgggaa 420
agatgtggaa tttcctaatt actatccgtc agttgtcttc tgggctgtgt ggacctaat 480
gactgcttgt ccagaagca atttaaggag cagtttccag acatcagtca agaattctgat 540
tctccatttg ttttcatctg caaaaatcct caggaaatgg ttgtgaagt tcctattaaa 600
ggaaatccaa aaatctggaa attggattcc aagatccatc aaggagcaaa gaaggggtta 660
atgaagcaga ataaagctgt ctgaccagg agaaaaggaa ctatacagca tagtggagtt 720
ttgtgtacta aaattgctat ctactggtcc tttggaattg aagtagtaga aacctaaagg 780
cttggcgtca ggcttgaata tctcagaact taaactctta ccaaactctg tatatttttc 840
ttaaggagtg ggattcctac tttatgtaat ggggtcgaaa tctttgaaca cattatttat 900
aaaaacctgt ttaaaaggct gacggtatcg ataagcttgg atatcgantt cggcacgagc 960
ccacctctac ctngggggg accggcctgg acgtggtgg ccccgggacc cagcagagct 1020
gggggaaggg tcagccccc aaagaaatgg ggggtgcatg tg                                     1062
```

<210> 64

<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

<400> 64
ggcagagggg agaggaaggg aggggagggg agcccccttct tcctggtaga tacaaagctg 60
ggctctggat acccttgaag cagtgcacag cctgtacaac agtccccagc agccctgtct 120
atccccagc atctccctgc tagctgctgt tccctctcct cccgctggtt gggcctgctg 180
ccaagctgtg gtgactcagc tgagctggca cattgacccc agcttattgt ttaaaaacca 240
gcccgaactg gnaatttatg gtttcctatc cccttccaca catttttctg gccacaaggc 300
aagaaactta tctctggcat cttcagattt cttstatttw attttgggnc ttcccttgcc 360
tggcaatatg tttcatagag tgggtaagtg agacctgaca ggtgttttca aggataattt 420
ca 422

<210> 65
<211> 709
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (674)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (684)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (692)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (697)
<223> n equals a,t,g, or c

<400> 65
aattcggcag agcgcttctc cattctctgt ggggtgtgtt gttttcttca tgaattccga 60

```

agtttactct tggatgatct agttgaagag ctagtgttta ctgatcacac tgtcttctct 120
ccttgaaatt ggtgcatatt agctgcttct agtcagccct ctgcccaga atccccaaaa 180
agaaaattgt tagttcaggg attgtagctt ttttttgggt ttaacatgag atatgtgatt 240
ataataaaact tcaagtattc aggaccattt tatggataaa aggagaatct aactttttaa 300
agttgggaaa atgattttaat attggaaaact caagagttac aaattcttac agttatttca 360
aaactaaagg tttcttttaga gctccaaaatt tagagctata aatcctatat ccgtaatcaa 420
atccagtact gataacaatg aacaattgct gaagagtaat attctctctc tctttaccaa 480
tgtaagcctt agcattggta ctttcttgwa wtatcttttt gcatgccatt atgatcagaa 540
aaaacaaaaa gctaccacaga aagggcagcc acattctaaa tgataggctt ttacctcctt 600
gagggggctg ctagggtacct acctggatta ggaattcatt tggtaaacia cagggggcct 660
tttaaatcta aatnaccatt tccnaataat tngtttnccg tttattccg 709

```

<210> 66

<211> 1302

<212> DNA

<213> Homo sapiens

<400> 66

```

gctcgacaag aagagaaaaga aggacatgct gaatagcaaa accaaaactc agtattttcca 60
ccaggaaaaa tggatctatg ttcacaaagg aagtactama gagcgccatg gatattgcac 120
cctggggraa gctttcaaca gactggactt ctcaactgcm attctggatt ccagaagatt 180
taactacgtg gtccggctgt tggagctgat agcaaagtca cagctcacat ccctgagtgg 240
catcgcccaa aagaacttca tgaatathtt ggaaaaagtg gtactgaaag tccttgaaga 300
ccagcaaaac attagactaa taagggaact actccagacc ctctacacat ctttatgtac 360
actggtccaa agagtcggca agtctgtgct ggtcgggaac attaacatgt ggggtgtatcg 420
gatggagacg attctccact ggcagcagca gctgaacaac attcagatca ccaggcctgc 480
cttcaaaggc ctcaccttca ctgacctgcc tttgtgccta caactgaaca tcatgcagag 540
gctgagcgac gggcgggacc tggtcagcct gggccagctg ccccgacct gcacgtgctc 600
agcgaagacc ggctgctgtg gaagaaactc tgccagtacc acttctccga gcggcagatc 660
cgcaaacgat taattctgtc agacaaaggg cagctggatt ggaagaagat gtatttcaaa 720
cttgtccgat gttacccaag gaaagagcag tatggagata cccttcagct ctgcaaacac 780
tgtcacatcc tttcctggaa gggcactgac catccgtgca ctgccaataa cccagagagc 840
tgctccggtt cactttcacc ccaggacttt atcaacttgt tcaagttctg aatcccagca 900
catgacaaca cttcagaagg gtccccctgc tgactggaga gctgggaata tggcatttgg 960
acacttcatt tgtaaatagt gtacatttta aacattggct cgaaacttca gagataagtc 1020
atggagagga cattggaggg gagaaatgca gttgctgact gggaaatttaa gaatgtgaac 1080
ttctcactag aattggtatg gaaaagcaaa atactgtaaa taaacttttt ttctaacaat 1140
ttgccagcaa gactataagg gcaataattc tatttcagcg gtgaaaatgg agtcctctta 1200
atggtcacag aaactctctt atagttccct aggaagaaaa aggcaaaact caaatacaaa 1260
ataggacgct ttgtttacaa tgtgaaaatt tgtttagaaa ag 1302

```

<210> 67

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 67

```

aattcggcac gagcttctgt tgggtgttatt ttcaattcta tttccagtgc cacaatagag 60
tgatatttaa gcaactccta caggcgaagg ccctgcagtt cctccagatt gacagttgca 120
gactgggcag tgtcaatgag aacctctcag tattgtgat ggccaaaaag tttgaaattc 180
ctgtttgccc ccatgctggt ggagttggcc tctgtgaact ggtgcagcac ctgattatat 240

```

```
ttgactacat atcagtttct gcaagccttg aaaatagggt gtgtgagtat gttgaccacc 300
tgcattgagca tttcaagtat cccgtgatga tccagcgggc ttcctacatg cctcccaagg 360
atccccggcta ctcaacagaa atgaaggagg aatctgtaaa gaaacaccag tatccagatg 420
gtgaagtttg gaagaaactc cttcctgctc aagaaaatta agtgctcagc cccaacaact 480
tttttctttc tgaagtgaag gggcttaaaa tttcttgga atagttttac aaaaatggat 540
ttaaaaaatc ctaccgatca agatgagttc agctagaagt cataccaccc tcaggaatca 600
gctaagtaat tattacttga ttcttttagc aaatcaatgc acgttatcct acttaatcct 660
taaataagtt tagatttaac taacccaaag tccaggagga tgttcttaca aaaatagcta 720
tatcaagggc tggcacctag acattaaact gtaatttgaa aataagcaac atgttgcata 780
acttggtgga ataattcctt gttctgttta acacttgctc taaattagca gaataaaaaat 840
agtcgtgcaa caccgggggt atctggtatg caacgaaggg raaaatattt cactgattaa 900
ccccgaagtg gttttgcac ttttccttgc ttaattctaag catattatta gagaagtcac 960
accatgctga agctaattgag ggcaaaatgg tagtccatag attattttta aataaccctt 1020
taaggttata aaagtttaaa aaaaaa 1046
```

<210> 68

<211> 501

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (311)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

<400> 68

```
caagagaaga aattatgaaa gggcgtgaat accaagaggc aggttattgg gggccatctc 60
agaggctgcc caacacaggc tactcttttg ccccgatga ttcatgttcc ttccaaatgc 120
aaaatgcccc gtcccaagat ctccaaaagt cttatcccat tataggatta gctcagagtt 180
cagaacctta tcatctaaag ttccagggtg aggttaaggct tttgggtgta gttattttat 240
tacagctcct agcacacttc tagtggtata ctaatgcctc ttctgtatag ttacttgga 300
aataaatgat ntaggtactt tgatccatat ggagttctgt gtaggaagat caacctagat 360
ctgatgttag ctggtaaaca ctgtagtggt aaaaaggcac tgtnttatga tagctctttt 420
tgacagtgcac tgggattatg gggcaaatgg taaatggcat gcaattgaga tcagtattag 480
gttattaatt gaactggaat c 501
```

<210> 69

<211> 581

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<400> 69

```
aattcggcac gagggaaaga aggccatgta ggggcttgct ttagtcatcc actgctaact 60
cattaactat taattcaagc aatatgtatt atagaaccgt tttgtgtagc attggaatat 120
tgtccatttt gtaagtcatt gtgaatgtnc ttaattatca gcttgaaggt atttttgtat 180
taaaagttga cattgaagaa cctaagtgga tgatgggatt tggggccagt agtgaaagta 240
tgtttcctct aaaatatttc cctaaacagt ggtatacatg gttattttat tatgagattt 300
gtatatgtyc tgtgtttctc tgtgaacaat gtttcagtct ctctgtcacc atatgtaagg 360
ggaagtccac aaatatagac tacattgcac aaaactaaaa ttgttaatta caagaaaata 420
taggtgctta ccttttgaag gtttattaat acatatgggt gtcacaatac gtatatatga 480
taaagtgtgt acatatacag atgtttatgg tgtataaatt tttctatacc caaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggccccc a 581
```

<210> 70

<211> 1076

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 70

```
tccaaacaga gggagcagct atttaagggg agcaggagtg cagaacaaac ragacggcct 60
ggggatacaa ctctggagtc ctctgagaga gccaccaagg aggagcaggg gagcgacggc 120
cggggcagaa gttgagacca ccagcagag gagctaggcc agtccatctg catttgctac 180
ccaagaactc ttaccatgaa gaccctccta ctgttgccag tgatcatgat ctttggccta 240
ctgcaggccc atgggaattt ggtgaatttc cacagaatga tcaagttgac gacaggaaag 300
gaagccgcac tcagttatgg cttctacggc tgccactgtg gcgtgggtgg cagaggatcc 360
cccaaggatg caacggatcg ctgctgtgtc actcatgact gttgctacaa acgtctggag 420
aaacgtggat gtggcaccaa atttctgagc tacaagttta gcaactcggg gagcagaatc 480
acctgtgcaa aacaggactc ctgcagaagt caactgtgtg agtgtgataa ggctgctgcc 540
acctgttttg ctagaaacaa gacgacctac aataaaaagt accagtacta ttccaataaa 600
cactgcagag ggagaccccc tcgttgctga gtcccctctt ccctggaaac cttccaccca 660
gtgctgaatt tccctctctc ataccctccc tccctaccct aaccaagttc cttggccatg 720
cagaaagcat cctcaccaca tcctagaggc caggcaggag cccttctata cccaccaga 780
atgagacatc cagcagattt ccagccttct actgctctcc tccacctcaa ctccgtgctt 840
aaccaaagaa gctgtactcc ggggggtctc ttctgaataa agcaattagc aaatcawrwa 900
aaaaaaaaaa naaaaaagaa aaaaagtttt ggcctaaatg agtcgtatta cagttgacgc 960
ggccggcgaa tttagtagat ggtgtaattc gaccgcagaa attccggaac cggaactctg 1020
aggggtgaca agtttcccca agagcggcgg attaaggctt gggcggacaa agggcg 1076
```

<210> 71

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (347)

<223> n equals a,t,g, or c

<400> 71

```
gcccacgcgt ccgaggaggg ccgcstttcc ggtctgggtc ccsgagagga ctgccttgct 60
cacctgtccc ctcggcgcgg ccccgaggag ctcccgagag gcccmmggga tcgctggccc 120
tccgaactcc acagcaatga gcaagttggg caagttcttt aaagggggcg gctcttctaa 180
gagccgagcc gctcccagtc cccaggaggg cctgggtccga cttcggggaga ctgaggagat 240
gctgggcaag aaacaagagt acctggaaaa tcgaatccag agagaaatcg ccctggccaa 300
gaagcamggc acgcagarta agcgagggat cwgmacwaaa tagatgnttt gatgcaagag 360
atcacagagc aacagg                                     376
```

<210> 72

<211> 374

<212> DNA

<213> Homo sapiens

<400> 72

```
aattcgacsa gccagggcac cctgcccattg tatcccamgc agagggagca gaaccagcgg 60
tgtaactact gtgcttgaca cccagggcag gtcttttttt aactcaccga tcttccatgc 120
aacaaaattg ttttctgtga aaagcaggaa atgaataaca acagcgtagg tactccactt 180
caaatttccc aagaaattca gaagaattgt gaacaagttg ctgggtttcac aatactgcaa 240
gacactgcaa gttattccaa gttcctacag gacaacgatg cacaattatt tacttactta 300
tgttttaaata tacctatcag tttgactttc atcctttggg gacattctaa taatttatgt 360
aaataattat tcag                                     374
```

<210> 73

<211> 419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (221)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (411)

<223> n equals a,t,g, or c

<400> 73

```
aattcggcag agctgcattg tcttttaggg ccaatggact tggaggcata gagattttat 60
aactactgcc agaaccctaaa tattgccagt sggcctcttc tgctgctgtt gctagctgtc 120
ttcttctggg ggaaatgggt tgggttctaa atatgaatta acacagggct gtcttcgatg 180
aattcagcac aaaatgttct cagcaattga acactcggag ngaagtgtta ggcatttagt 240
gcagactcat agaatagcag gacagggagg gatttggatc tgggcaagca ggagatgggt 300
atgaacatct gtcttttgag acctgccgag gtggcaatga aggtagaggc ccctgtgttg 360
```

aggctctttat tcaagaggct gtgggtccctt tgggacttaa catagcatcc nttagacag 419

<210> 74

<211> 286

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (154)

<223> n equals a,t,g, or c

<400> 74

gcaggcgact tgcgagctgg gagcacttta aaacgctttg gattcccccg gcctgggtgg 60
ggagagcgag ctgggtgccc cctagattcc ccgcccccg acctcatgag ccgaccctcg 120
gctccatgga gccnaggcaat tatgccacct tggnatggag ccaaggatat cgaaggcttg 180
ctgggagcgg gaggggggagc gaatctgggc gcccaactccc ctctgaccag ccaccagcg 240
gcgcctacgc tgatgcctgc tgtcaactat gcccccttgg atctgc 286

<210> 75

<211> 633

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (89)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (531)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (570)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (623)

<223> n equals a,t,g, or c

<400> 75

```
aggtagaaaa gcgagcagcc gtcctttcac agcctcagaa agtgctcgct tcccttcggg 60
ggcttttcgcg aatcccagag caatctcgna ggcggtatth gacctgtcca aagacgactt 120
gatacctcta taatgtaaca gaaaagggtca gaaaatatta agcaagtaga agtgtggagc 180
atattaagca agatgaacat ctcgggaagc agctgtggaa gccctaactc tgcagataca 240
tctagtgact ttaaggacct ttggacaaaa ctaaaagaat gtcattgatag agaagtacaa 300
ggttttacaag taaaagtaac caagctaaaa caggaacgaa tcttagatgc acaaagacta 360
gaagaattct tcacaaaaaa tcaacagctg agggaaacagc agaaagtcct tcatgaaacc 420
attaaagttt tagaagatcg gttaagagca ggcttatgtg atcgctgtgc agtaactgaa 480
gaacatatgc ggaaaaaaca gcaagagttt gaaaatattc cggcagcaga ntcttaaact 540
tattaccgaa cttatgaatg gaaaggatan tctaccggga ggaattaaaa gctttctgga 600
caactccgcc ggaattgnga tgntcaccgc ttc 633
```

<210> 76

<211> 256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<400> 76

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agcacaagtt caggaccagc ctgcgcaaca tagcaagatc cccatctnta caaaaaaat 60
aaacaattag ccagggcata gtggcatatg cccattgtcc catctactct ggaggctgag 120
gcgggagggt cgangttcac agaaccacca taaccatcc agctagccag gtagaaggcc 180
tccagggtcc acgttgcatc ccccagggtc tgatgctgtc tgcaatcttc atccctaggc 240
agwagagcta aaaatg 256
```

<210> 77

<211> 694

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (668)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (673)

<223> n equals a,t,g, or c

<400> 77

```
agcagcaagg ccaagcatgc aagaktcacc atccaccctg gccatgatgc agggcctcct 60
ttgctggacc cgcagccctg caggacagag actggcagcg caccgtcatc gccatgaatg 120
ggatcgaagt aaagctctcg gtcaagttca acagcagggg gttcagcttg aagaggatgc 180
cgtcccgaaa acagacaggg gtcttcggag tcaagattgc tgtggtcacc aagagagaga 240
gggtccaagg gccctacatc gtgcgccagt gcgtggagga gatcgagcgc cgaggcatgg 300
aggaggtggg catctaccgc gtgtccggtg tggccacgga catccaggca ctgaaggcag 360
ycttcgacgt caataacaag gacgtgtcgg tgatgatgag cgagatggac gtgaacgcca 420
tcgcaggcac gctgaagctg tacttccgtg agctgcccga gcccctcttc actgacgagt 480
tctaccccaa cttegcagag ggcacgcctc tttcagaccc ggttgcaaag gagagctgca 540
tgctcaacct gctgctgtcc cttgccggag caaaccttgc ttcamctttc cttttccttt 600
ttggraccam ctgaaaaagg gttggcagag aaggagggca gttcattaag ttccttgcaa 660
aaaacttngc canggttttt ttggcccaa ggtt 694
```

<210> 78

<211> 2562

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (75)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2556)

<223> n equals a,t,g, or c

<400> 78

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ggcacgagt tagacgaagg ctccatatca ccccggaactc tttcagccat taagagagct 60
cttgacgatg acgangatgt aaaagtgtgt gctggggatg atgtgcagac gggagggcca 120
ggagcagaag aaatgcgtat aaacagctcc accgagaaca gtgatgaagg acttaaagtg 180
agagatggaa aaggaatacc gtttactgca acacttgctg catctagtgt gaactctgca 240
gaggagcacg tagccagcac taatgagggg agagagccca cagactcagt tccaaaagaa 300
caaatgtcac ttgttcacgt ggggactgaa gcctttccga taagtgatga gtctatgatt 360
aaggacagaa aagatcggct gcctctggag agtgcagtgg ttagacatag tgacgcacct 420
gggctcccga atggaaggga actgacaccg gcatctycaa cttgtacaaa ttctgtgtca 480
aagaatgaaa cacatgctga agtgcttgag cagcagaacg aactttgccc atatgagagt 540
aaattcgatt cttctcttct ttcaagtgat gatgaaacaa aatgtaaacc gaattctgct 600
tctgaagtca ttggccctgt cagtttgcaa gaaacaagta gcatagtaag tgtcccttca 660
gaggcagtag ataatgtgga aaatgtggtg tcatttaatg cttaaagagca tgagaatttt 720
ctggaaacca tccaagaaca gcagaccact gaatctgcag gccaggattt aatttccatt 780
ccaaaggccg tggaaccaat ggaaattgac tcggaagaaa gtgaatctga tggaagtttc 840
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aaacctccct cagaacaagg cgaagaggaa ctggtaggaa ctaggagggg agaagcccct 960
gctgagtcgg agagcctcct gagggacaac tctgagaggg acgacgtgga tggtagacca 1020
caggaagctg agaaagatgc ggaagattcg ctccatgaat ggcaagatat taatttgagg 1080
gagttggaaa ctctggagag caacctctta gcacagcaga attcactgaa agctcaaaaa 1140
```

```

cagcagcaag aacggatcgc tgctactgtc accggacaga tgttcctgga aagccaggaa 1200
ctcctgcgcc tggttcggcat tccctacatc caggctccca tggaagcaga ggcgcagtgc 1260
gcatcctgga cctgactgat cagacttccg gaaccatcac tgatgacagt gatattctggc 1320
tgtttgagc gcggcatgtc tatagaaact tttttaataa aaacaagttt gtagaatatt 1380
atcaatatgt ggactttcac aatcaattgg gattggaccg gaataagtta ataaatttgg 1440
cttatttgc tggaaagtgt tataccgarg aataccaact gtgggttgtg taaccgccat 1500
ggaaattctc aatgaattcc ctgggcatgg cctggaacct ctctaaaaat tctcagaatg 1560
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cttctttaga ttagcacaac aggagaaaga agatgctaaa cgtattaaga gccagagact 1920
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agcagtttct gttgccatgg agaaagaatt tgagctactt gataaggcaa aacgaaaaac 2040
ccagaagaga ggcataacaa ataccttaga agagtcacatc agcctgaaaa gaaagaggct 2100
ttcagattct aaacgaaaga atacatgcgg tggatttttg ggggagacct gcctctcaga 2160
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gagaacagct gcgaaagagc caaaaaccag tgcttcagat tcgcagaact cagtgaagga 2280
agctcccgtg aagaatggag gtgcgaccac cagcagctct agtgatagt atgacgatgg 2340
agggaaagag aagatggtcc tcgtgaccgc cagatctgtg tttgggaaga aaagaaggaa 2400
actaagacgt gcgaggggaa gaaaaaggaa aacctaatta aaaaatatgt atcctctata 2460
attagttatg acagccattt gtaatgaatt tgctcgaaag acgtaataaa attactggt 2520
rgcacggtaa aaaaaaaaaa aaaaaaaaaa aaaaanaaac aa 2562

```

<210> 79

<211> 1610

<212> DNA

<213> Homo sapiens

<400> 79

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aattcggcac agggaaacat tctggtaatt tgtagagatc tgttggcatc tctgcttcac 60
aaactgga aaatcatttg taagtcttgc taattacttt tcttgagaa gaaaaaaat 120
gctacagttg caaacaatg tatagttttc aaaaagaagc aacttttttg ctcccagtt 180
tattcttagt ttccagccca cgccttgcca tagsratagg catagtgatg gcctcaattc 240
tttctctctt gcatccgtac cttttgctgt gtgactttgc agctcctctc attaaagagg 300
cagagcccc tctcccaccc ataggagcag gttttgagag taacagaatg aagtgaatat 360
gacactgtgc cagttctaag accagccctc aaagggttcac gtgtttctgc ttgctttcac 420
tgtattgaa atgttgctgt gagaaagaca tctctgaaac agctgaatgg tcctaagaaa 480
aggatgagag atgcaggag cagagctccc aactgaggcc agcctagatc acctaagagc 540
caggccccc gtttactctc atgtgtaagc aataaatgct taccacagca ataccaccaa 600
ggtttggtg tggtttatat acagcattaa tgtggcaata ggtgcaatac accctgttaa 660
acaaaccata cacatatgac tctaacccta atcataaatt gattcagtct gttcagttcc 720
acaacgctgt ttctccaga atctcacaga tgacttacta aatccaacac aaatacacct 780
cagactttct gtctagctcc caaccagtta aaagcaattc taaatatatt tttcttagt 840
cgtagtgcaa aagtatatcc tctccctttc tctatagttt tctctcattt tgtcttcaga 900
cctagaagca tgagagcccc gctgtcaaag tcatctagac ccccttcaga aggtcattaa 960
atttgtctat ttcacaggat tgcaagataa aatacagaat gccagtttra atttgaactt 1020
cggataaaca acaaatTTTT ttttagtata agcatatccc atacaatatt tgggatatrc 1080
ttatatTTTT atattgttta tctgacgttc aagctractg ggcctcctgt atttttctta 1140
gctaaatctg gcaactgtgc tatttcattg aaaacctgaa agtgtaaaaa gaaggaagaa 1200

```

```
gcagaatctg ccatatgagt aatagaagtg agcaggccca ggactcccta agtcaagaaa 1260
ccaagaggcg tcattacgga aaagagtaac tcaccctgtg tgctccttgg tagttctccc 1320
tcagcgatgc ccccatgtta tgaatgggga aaagtccact gaagggttca tagtgaagaa 1380
actttttgga tgatttctgk tgggtgggtt tggatacctt caagggatca gaaaataata 1440
tacttaggaa attttggtta tgtcatcatt actctctaca ttattattat gacgggttaca 1500
attgttaaat ctaggtgggt ggtatgtggg ttatattgta catgattttt aacttgtctg 1560
catgtttgaa attataataa agtcaataaa taaattattg agacactctt 1610
```

<210> 80

<211> 1048

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (131)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (997)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1021)

<223> n equals a,t,g, or c

<400> 80

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cagacgggag gctacagtga tggccttggg ggaaattcac tgtacagtcc acataattta 120
aatgctaatt naggttggca ggacgcaaca actccatctt ctgtgacttc tcctacagaa 180
ggccaggaa gtgtgcactc ggatacctct aactaatctc tggccacact tttccctgag 240
ctacatgcct tgataagtgc attcagagca ataggaggaa aaggaaagcg tttttgtagc 300
ccaccatcta cagctttact gtaaaacctt gtcttattcg agaacttggg aaatctgttt 360
tttaaggaat cataatcatt tgtatttata cttaaaaaca cacaatgtta aaaaaataa 420
agcactttat ccaattaggc caagatttaa cattgttgac agtcctgtag ctattttatc 480
ataatttatt atcaatatatt tacattaatg gtttcacagt tgccaattac ttggccttaa 540
gggtaaaaag tacaatatat actaaacctc aaccgttaaa gcagatgcaa aaattcacct 600
cacctaaatt gaacttcttg catatttcca ttactgactt ggattgtctt tctttcatat 660
cactaatgga gttggaataa agagctgttt gcctatccct gttaatgatg gttgtgttta 720
agaatcttcc tcgtcacggt tgtgttcaga tctcttatgt tataattaga tcagagactg 780
gtagcatcgt ttctctctct gaaagcacca gtgccagag tctgtctcgt aataaaatta 840
tgatccgtct ggggttttac ggtgtgcact ggggtgctgca cagacttgtc aaggtttgcy 960
acgtccyckg ggcaactgcma aaggcccgcc cccggngtgt tgtaaaaatg tagccaaaga 1020
ntatttaaac atccccacaa ccaaacac 1048
```

<210> 81

<211> 1136

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1124)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1131)

<223> n equals a,t,g, or c

<400> 81

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ggacagattg acttttttga ccctacattt gactatgaga tgatcttcg gggaaacagga 120
gcactgatat ttgtcattga ctcacaggat gattacatgg aagccctggc caggctccac 180
ctcacggtga ccagggccta caaagtgaat actgacatca acttcgagggt gtttattcat 240
aaagtggatg gtctgtcaga tgaccacaaa attgaaaccc aaagagatat tcaccagagg 300
gcaaacgatg accttgcaga tgctggatta gaaaaaattc acctcagctt ttatctgaca 360
agcatatatg atcattcaat atttgaagct tttagcaaag ttgttcagaa actgattcca 420
caactcccaa ctctggagaa tttgctgaac atctttatct caaattctgg aattgaaaag 480
gcatttctat ttgatgtggt cagtaaaatt tatattgcaa ctgatatgtac tccgggtggat 540
atgcaaacct atgagctctg ctgtgatatg atagatgtgg ttattgacat ctcttgatt 600
tatggtctca aagaagatgg agcaggaacc ccctatgaca aggaatccac agccatcata 660
aagcttaata atacaaccgt gctttattta aaagaggtga caaagttcct ggctctcggt 720
tgctttgtca gagaggaaaag ctttgaaaga aaagggctaa ttgactataa ttttcattgc 780
ttccggaagg ccattcatga agtttttgag gtgagaatga aagtagtaa atctcgaaaag 840
gttcagaatc ggctgcagaa gaaaaagaga gccacccta atgggacccc tagagtgtctg 900
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ccatgttgca ctaaaggaag aggaagaagg agattgggac acataccatt gatttggtgt 1020
taaaaaaaaa aaattcctgc aaccctcttg atcttctctt ttataaataa agtaagcact 1080
ttgaagcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaangggggg ncccc 1136

```

<210> 82

<211> 297

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<400> 82

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acagccaaca gggggagcag tgcgagcntg aaggcagaca gtggcctggc ccagtctgat 60
gggagagacc caccgaccct gtggggctgg tccctacatc tggcgctctg acgtggggct 120
ctccctcgct gtgtgaagtt gcaccctgag tgcgggatca gcggaggagt tcaacgagag 180
attcctgagg attgcagtct ataaacttgg tgcaggcggc tgaccccgca gctyaacaag 240
atcaagaggg tgataatcaa gcccctcagc ccgaaactca ggctgtctcag ggaaaag 297

```

<210> 83

<211> 2150

<212> DNA

<213> Homo sapiens

<400> 83

```
aattcggcag agctcacgag agaggatttg ggcgccctcct ctgtggattc tggccaggcc 60
gggttcggcg gttgctgtra gagcgggctt cccaacacca tgccgtccgc cttctctgtc 120
agctctttcc ccgtcagcat ccagccgtg ctcacgcaga cggactggac tgagccctgg 180
ctcatggggc tggccacctt ccacgcgtc tgcgtgcttc ctcacctgct tgctctcccg 240
aagctacaga ctacagatcg ggcactttct gtgtctagtc atcttagtct actgtgctga 300
atacatcaat gaggcggctg cgatgaactg gagattattt tcgaaatacc agtatttcga 360
ctccaggggg atgttcattt ctatagtatt ttcagcccca ctgctggtga atgccatgat 420
cattgtgggt atgtgggtat ggaagacttt gaatgtgatg actgacctga agaatgcaca 480
agagagaaga aaggaaaaga aaaggagaag gaaagaagac tgaggggcag cagctgcttg 540
gagtttgct cttcccgtc caccagtg cagctcccag gctgcagtgt gctggcgctg 600
ggcatccttc cagctgactc atggtttgaa aaaccgttgt tttattttaa tatccacagt 660
ggtagggcac acactgaagt tgcttttcag ccagcactga atgtatccat caggacatgc 720
gtcttcaggt gcctgatctt tgtagtcagg ctgtgggaac ggtctctgca gagcttcata 780
actgggaatt tgatttgaag aagtccatgt catatgtgta actagtacta attataaata 840
taaaatacac aatataaaat atgaaactca ataataaaca gtgccacctg tacatgggca 900
ccatgccctc ctccctcgtg tgtgttttct agtgcattgc acagttcgca gtagaggggtg 960
ttttcacctt ccaagacatg gggcaaagtt tggagacacc tgggtgtcac tggagggggt 1020
ggtgtcctg gcttctcctg tggagcccgg ggtgatgcat aaaatcctgt gtgcctgggt 1080
cagccgcac acagacaatg acttgacatg aaatgtcagc tgtgctgggg gcagagagac 1140
cttggaagga agctcttgga aaatacgttg tatctcagtt tgatgaacca attcacaaga 1200
ggctaggccc tctctagcaa agttatgggc tgctttactg aaaacagaat ggaagccctg 1260
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gtgcttggga acacaatgct ccagttctg ttaggacagg catactgtta ctttgcaata 1380
tccactttat aaaatagctc ctgcccagtg gctcttgrtt cctgtcaa atgtggacctgt 1440
agtttaagaa tgacagggtg ttagagaccc agatatttaa aaataggtgt tcaataaggg 1500
aatactgatt gtgcattgta tctggatagc atgcctaatt gtgcatttct gaaagttacc 1560
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aggtgcagag ctcaccagcc aagttcatgc ccctctcggg cctttgtggc tgagaagtgg 1680
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gtataacatt ttcacatct gatatgggtt ggctttgtgt cccacccaa attgcatctc 1860
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tggtttcccc tatgttgta tcataataga gagggagttc tcacaagatc tgctggtttt 1980
aaagacagca gtttcccctg ctgtcactgt ctctctcctg ctgccttgatg aagaaggtgc 2040
ttgtttctcc ctctgccatg attgtaagtt tcccgagctc cccggccatg tggaactgag 2100
tcaattaaac ttcttgttta taaagtaaaa aaaaaaaaaa aaaaactcga 2150
```

<210> 84

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<400> 84

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gccgnacac cccacacact ccagcctcgg cccactcct tgggctctta aggtcctgcc 120
tcaagaacca cttcctgagt cttagtgtat gtgtgtacaa aagaatgaaa gaagtctcta 180
gagctaaagg aaggagatyc gggctgggct gagaagcatc ttccaggatc acggscttcc 240
cgcgggacac accaagccca ttccggatct tgctcttcct gaccatggyt ggcaggytgt 300
ggaggaggas cggagagcag aagaaaggag tattcatcag gttccttatt gtgctgccac 360
tagatgccag gcatgtgctt aggcttgggg ggctgcaagg agaggaagac agcggccctg 420
ccctytgyta gcaggcagaa ccgagttytg gccacamtgt gaaggaaagg cagaagcctg 480
cgktggcary tggtttaagc tcagngggca gggaaaggga agaggagaat ggttttcacg 540
gagcagaagg ttgtgctcaa ggtggacctt ggagaataaa ggggagagct ccagggaaca 600
g 601
```

<210> 85

<211> 534

<212> DNA

<213> Homo sapiens

<400> 85

```
cgcgctgacg ttcctcctaa ctctgccag aaacrgctct cctcaacatg agagctgcac 60
ccctcctcct ggccagggca gcaagcctta gccttggtt cttgtttctg ctttttttct 120
ggctagaccg aagtgtacta gccaaaggag tgaagtttgt gactttggtg ttctggcatg 180
gagaccgaag tcccattgac acctttccca ctgaccccat aaaggaatcc tcatggccac 240
aaggatthtg ccaactcacc cagctgggca tggagcagca ttatgaactt ggagagtata 300
taagaaagag atatagaaaa ttcttgaatg agtcctataa acatgaacag gtttatattc 360
gaagcacaga cgttgaccgg actttgatga gtgctatgac aaacctggca gccctgtttc 420
ccccagaagg tgtcagcatc tggaatccta tcctactctg gcagcccatc ccggtgcaca 480
cagttcctct ttctgaagat cagttgctat acctgacctt tcaggaactg ccct 534
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<210> 86

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 86

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tgctgactca tctatagaag gaaactacac tctgagagtt gattgtacac cgctgatgta 60
cagcttggtg cacaacctaa caaaagagct gaaaagccct gatgaaggct ttgaaggcaa 120
atctctttat gaaagttgga ctaaaaaaag tccttcccca gaggttcagt gcatgcccag 180
gataagcaaa ttgggatctg gaaatgattt tgaggtgttc ttccaacgac ttggaattgc 240
ttcaggcaga gcacggtata ctwaaaattg gggaaacaaa caaattcagc ggctatccac 300
tgtatcacag tgtctatgaa acatatgagt tgggtggaaaa gttttatgat ccaatgttta 360
aatatcacct cactgtggcc caggttcgag gagggatggt gtttgagcta gccaatcca 420
tagtgctccc ttttgattgt cgagattatg ctgtagtttt aagaaagtat gctgacaaaa 480
tctacagtat ttctatgaaa catccacagg aaatgaagac atacagtgtg tcatthgatt 540
cacttttttc tgcagtaaaag aattttacag aaattgcttc caagttcagt gagagactcc 600
```

```

aggactttga caaaagcaac ccaatagtat taagaatgat gaatgatcaa ctcatgtttc 660
tggaagagc atttattgat ccattagggt taccagacag gcctttttat aggcattgtca 720
tctatgctcc aagcagccac aacaagtatg caggggagtc attcccagga atttatgatg 780
ctctgtttga tattgaaagc aaagtggacc ctccaaggc ctggggagaa gtgaagagac 840
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aagaggattc tttagagaat ccgtattgaa tttgtgtggt atgtcactca gaaagaatcg 960
taatgggtat attgataaat tttaaaattg gtatatattga aataaagttg aatattatat 1020
atagttaaaa aaaaaaaa                                     1037

```

<210> 87

<211> 597

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<400> 87

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gcggccctac tactactaaa ttcgcggcnc gtcgacaagg agtcctgctt atcacaatga 60
atgttctcct gggcagcgtt gtgatctttg ccaccttcgt gactttatgc aatgcatcat 120
gctatttcat acctaattgag ggagttccag gagattcaac caggaaatgc atggatctca 180
aaggaaacaa acaccaata aactcggagt ggcagactga caactgtgag acatgcactt 240
gctacgaaac agaaatttca tgttgacccc ttgtttctac acctgtgggt tatgacaaag 300
acaactgcc aagaatcttc aagaaggagg actgcaagta tatcgtggtg gagaagaagg 360
acccaaaaaa gacctgttct gtcagtgaat ggataatcta atgtgcttct agtaggcaca 420
gggctcccag gccaggcctc attctcctct ggcctctaata agtcaatgat tgtgtagcca 480
tgctatcag taaaaagatt tttgagcaaa maaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggnggcc gctctag 597

```

<210> 88

<211> 474

<212> DNA

<213> Homo sapiens

<400> 88

```

aatccttaac ctctgcatt ttagaaatac tccagagctt gtcttattct taccaaaatt 60
cctgtaggcc tttgactcct gactcaccct gtctgcagtg tccccagcc tgcaggggtg 120
ggtgwgtcac agcaaccctc agccaccagc tgttttccat ctgccggcct tcctggggga 180
gagtcacctc cagctgtagc ccctgtctat gggaaaagtc tcatgtcctt ttcattctct 240

```

cccactgcac actgtctctc accctagact ataattcaag tgaatttgac ctccatttat 300
tggaacaagcc aggsactgtg ctaggrataa tgwaaccat tagacaaatc tgaaagggag 360
ggatcactag actaaggggt agaaatgtgg agatgggagt aactttctgc atgtctttgc 420
aggaggcggc atgtgagaaa gctttttgga agaggcggca cctggagctg tgga 474

<210> 89

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 89

agactttgaa atcagaggaa ttccagaaga ggctgcaccc ttataaggat tttatagcta 60
ccttgggaaa actttcagga ttacatggcc aggacctttt tggaatttgg agtaaagtct 120
acgacccttt atattgtgag agtggtcaca atttcacttt accctcctgg gccactgagg 180
acaccatgac taagtgtgaga gaattgtcag aattgtccct cctgtccctc tatggaattc 240
acaagcagaa agagaaatct aggtccaag ggggtgtcct ggtcaatgaa atcctcaatc 300
acatgaagag agcaactcag ataccaagct acaaaaaact tatcatgtat tctgcgcatg 360
acactactgt gagtggccta cagatggcgc tagatgttta caacggactc cttcctccct 420
atgtctcttg ccacttgacg gaattgtact ttgagaaggg ggagtacttt gtggagatgt 480
actaycggaa tgagacgcag cacgagccgt atccccctcat gctacctggc tgcagcccca 540
gctgtcctct ggagagggtt gctgagctgg ttggccctgt gatccctcaa gactgggtcca 600
cggagtgtat gaccacaaac agccatcaag gtactgagga cagtacagat tagtgtgcac 660
agagatctct gtagaargag tagctgccct ttctcagggc agatgatgct ttgagaacat 720
actttggcca ttacccccag ctttgaggaa aatgggcttt ggatgattat tttatgtttt 780
agggaccccc aacctcaggc aattcctacc tcttcacctg accctgcccc cacttgccat 840
aaaacttagc taagttttgt tttgtttttc agcggttaatg taaaggggca gcagtgccaa 900
aatataatca gagataaagc ttaggtcaaa gttcatagag ttcccatgaa ctatatgact 960
ggccacacag gatcttttgt atttaaggat tctgagattt tgcttgagca ggattagata 1020
aggctgttct ttaaatgtct gaaatggaac agatttcaaa aaaaaacccc acaatctagg 1080
gtgggaacaa ggaaggaaaag atgtgaatag gctgatgggc aaaaaaccaa tttaccatc 1140
agttccagcc ttctctcaag gagaggcaaa gaaaggagat acagtggaga catctggaaa 1200
gttttctcca ctggaaaact gctactatct gtttttatat ttctgttaaa atatatgagg 1260
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tttaaagaaa caaaaatcaa actttacaga aagatttgat gtatgtaata catatagcag 1380
ctcttgaagt atatatatca tagcaaataa gtcatctgat gagaacaagc tatttgggca 1440
caacacatca ggaaagagag cmccacgtga wggagttyt ctagaagcty cagtgataag 1500
agatgttgac tctaaagttg atttaaggcc aggcattg 1537

<210> 90

<211> 304

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<400> 90

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tgacaccatg cctgggtaat ttttttaatt ttnattttca gtagagacaa ggttgcgcta 60
tggtgcccgg gctgggtatg aactcctgtg ctttaagcgg cctcatgcct cggcttccca 120
aagtgctgag gttgcagcta tgagccaccg caccagcctt acattccttc ttatcaccga 180
gaaacagggt gatcttcaca ggtgtaatga gtatgaaggg agtgccataa agatattttt 240
tattttttat ttattttatt ttttaatttaa tttttttttt tttgggatgg gngtcttgct 300
ctgg 304
```

<210> 91

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<400> 91

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ggtagagatg ggggtctcgtc atggtgacca ggctgggtctc aatctnctgg tctcaggcca 60
tccttccacc tcattctccc caagaactgg gattacaggc atgagcaact gcacctggctc 120
catatgcttc ttatagttga agaagtgaag ggtcaatgac ttactaaaa tactattaaa 180
gtaataaagc taggacttag ccccaattat tcatccttaa agtccaatac tttcaatata 240
ttaagttgct ctttattata tgaattctaa atatcttttt taccttttgt tatctaattct 300
ggaaatccta tataaatgta taattttata catgctgact gatatccyct ctagtcttgc 360
tatactagg 369
```

<210> 92

<211> 315

<212> DNA

<213> Homo sapiens

<400> 92

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gctttttacc ctctccaaac cttctaacco tagcttcatg aatttatgtt actcgcctag 60
agggctctct ataaatatat acatttgtaa cttctgttta atataaataa atcattcttc 120
atagcaagga ttctggcatc agttggagat tctttggatg gatgtgctcc catggagttt 180
ctattttaat gtactaacia cttatgactc gtctatctgt agtatcaatt atatccacta 240
tcacagtaac agtcaccact taatatgyat agratatctc attttaccac gcaattatgg 300
tatctctgat ttata 315
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<210> 93

<211> 701

<212> DNA

<213> Homo sapiens

<400> 93

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aacattacaa gggcttttat aaaaaaccct ttgttcatat ttcttccctt taaaatatgt 60
aatgtcaaaa atgactcacc ttttaaaaaat tatgcatgaa aacagggtgg aaacattcag 120
taatacgcta tttctccaac atcaagacaa ctaaaacaaa tgataaaaaat gtttattttt 180
```

```
acactccagc atatcgggtg agtttttaggg atgtgtatga atattttaa atttttaattt 240
cagttttaat gaaagctgaa cttaataggg aaagctagct cttggtaact agcaatgatc 300
aggcattggt tgcctctgtc aggttttctt atctgtttta ggtacatttt ttcagattct 360
gattgtttga gttaatgggt gaatttttaa agtttttagt tactttaa atakgatttttaa 420
attrcatatt aatttagaaa attcctgtgt ttactttatat tttaaattgt gaaatggatc 480
caatcattag aacagagaga atagtctctt gaaactgaaa tacttttagt ttactgacct 540
tgtgtaaaaga taatatgaag aaccagcttc caaaagaaac cagcatatgg cactataaac 600
tatttcattt gagcaccatt ctttaccatg gatataatga ttatgtatta tagtgaggatg 660
atcatacagk tcccccaaat gtgatgggtc aagggaattt a 701
```

<210> 94

<211> 459

<212> DNA

<213> Homo sapiens

<400> 94

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cgggcaactc tctggcatcc ttaatatctt tctatagaaa ttgtgatgaa agaacagata 60
agcctaagta aatctagcgt gtggagctcc tttaaaatgt gaagaccttg ccawctgggt 120
aaaaataaaa cttggttttg tcctaaatat ccttgctggg cctattatac ataaaaaaag 180
gggccacagc ccatttgcaa ggcttctgaa tgaactccat tcattctgta cttggaaatg 240
tctcttcagc cacaaaaaga acaatagtta taacctaat tctttggtgc catatcagca 300
gaagaagagc caagagacca ttatgaaaac tctagtaagt tctcttgggtg attatataat 360
gctgtawtca ttgatcatat tkctgtattt aaataagtac atttttttaa acatcataaa 420
gtggatcagt aatgctgtaa tatcacattt catgtatta 459
```

<210> 95

<211> 2589

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1056)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2568)

<223> n equals a,t,g, or c

<400> 95

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ggcacgaggg ctgccctttt gggttccagc cgggggtcacg tccagcctcc actgggaaac 60
cagtgactga ggcttgacc cagaggtgga ccaggcatct cctggccacc tgtgacctgg 120
gaagaagcga gtcagtggcc cgttcaacct gctctgcagc tgctataaat agcctccctg 180
tttccaagag gagtaagga agtgtttatc ttctaaaaac cagacgtttc ctgatgctct 240
gagcgttact cagtgtaca gaggagatgc acacgtcccc actatgttct gtcttgagaa 300
ggggacaaga gaaagaggaa aaggagccac tgtactttat tttgcaccta cagcgtgcct 360
tggcactggg ctgagagggc accttcctgc gtgaatcctg tgcggcaggc cttattgcca 420
taataagtca catcaaagac actgctgggc ataaaacact gttttacata ccatagggaa 480
aaacgctgcc aatcttaact aagatgctac aactgtacag ttcttccaa tcagagatgt 540
tcacgtgtga aaaaaaaact gtgctactta caatctatga aagctggtrt tatccactt 600
```

```

ggcaggtaag ggaactgagg tcctgtgagt gaagtgcct catgatcaca caacaggaga 660
tggcagggct gggattcaaa cccgggagtg tctgctgcca catccacac tcccactgcc 720
tggctccaag tcccaggaag ctcgagactg tgagttttct ccttgaaac tcacctggag 780
agagtccggg cacctgtgcc tatgtggagg gttccagccc cagccaggcc cctccgctgc 840
ccacaccctg ggaggagaag cggcctccct tccaggctca tctgctcact gcccgcatc 900
tcctggcaga gctgagggtct gagagatctg gactccaacc caagggccct ctcttgttat 960
tcaggggtgt ccacagttag gragggacct ggggccttgt cccaccacct tcctaggccc 1020
cgtgatcacc accccctcaa gcggggcccc agcccnctga gcacccctc acgtgacca 1080
gccctcggct gttccaggct cactgcccat ggtgtgctct tctgggccac agcagccagg 1140
gctccagggc gaggacrggg gacacctgaa aacacccgt tgttcatggt cttgtgcccc 1200
ttcattcgga gactcctgaa aaactgggct gtttgcaaag caaatccagc tccttgctct 1260
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acgtttccag tccctcgatg ccactaatca gcatggactg tgttcaggac acaggggtgaa 1380
cttttctctg acccccggtg ctggtcctgt gccagcacgt agtagttamt cagtagaggt 1440
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ataacgcaca caaagatact ccagaaacat ttgctgagta cctagtacgt gtgagggtgt 1560
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agggaaatga gatatttggg gcagaatcca ctgggctctc ttggccatcc gtcgcttg 1680
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tggtcacgc tgaaatcctt tttgcatcat gttttttgat gttggagtga tgaagtgtac 2280
atccccacc ccacacacca ctacctgtgt acagacctt taaaacatgt cttctttttc 2340
tgattcaata ctgtgacctc tccgatacag tctaactcct ggggatctgt aatcaagggt 2400
ttaaaccctg ggaagtgggt tgggaagggt ttgcactggt cttgagtgt gtgcttttct 2460
gtgttgtgtg ttttgatttt tgtcttttta tctgttttat attgacataa ttttcctgtt 2520
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aggaattc 2589

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<210> 96
 <211> 457
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (372)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (384)
 <223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (442)
<223> n equals a,t,g, or c

<400> 96
gagcacatct ggctctccat atgggaccgg ccgcctcgta gctgtttcac tcgcatccag 60
agggccacct gctgcgttct cctcatctgy ctcttcctgg gcgccaacgc cgtgtggtac 120
ggggctgttg gwgactctgc ctacagcacg gggcrtgtgt ccaggctgar cccgctgagc 180
gtcgacacag tcgctgttgg cctgggtgtcc agcgtggttg tctatcccgt ctacctggcc 240
atsctctttc tcttcyggat gtcccggagc aaggttatca atactctggc tgaccatcgt 300
catcgtggga ctgacttttg tggaaagtcc ttggttactta tcattaactg tgtttctgag 360
aagttataaa tntggcatct cctnctgcac aacttacctt tgggttataa taatctgggtg 420
accatcgtca cgttggactg antttggggg aagcctt 457

<210> 97
<211> 516
<212> DNA
<213> Homo sapiens

<400> 97
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gctgggtctta aactcctggc ctcaagcaat ccttctgcct tggcccccca aagtgtctgg 120
attgtgggca tgagctgctg tgcccagcct ccatgtttta atatcaactc tctctctga 180
attcagttgc tttgcccag ataggagttc tctgatgcag aaattattgg gctcttttag 240
ggtaagaagt ttgtgtcttt gtctggccac atcttgacta ggtattgtct actctgaaga 300
cctttaatgg cttccctctt tcctctcctg agtatgtaac ttgcaatggg cagctatcca 360
gtgacttggt ctgagtaagt gtgttcatta atgtttatct agctctgaag caagagtgat 420
atactccagg acttagaata gtgcctaaag tgctgcagcc aaagacagag cggaactatg 480
amaagctctc ctgccatctc caagcccact tttcag 516

<210> 98
<211> 314
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c

<400> 98

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ggagaccgcg cgcgggacgg ggaggaatgg cctgtccgcg ttaaaccatc acaagccatg 60
gttgcggaag ggccacgcgt cccccagtag gagaatgact ccgattcgtg accctcagcg 120
ccggtgcatg tcgatcttgg cccccagggc tgtgatgcag ccagccaggt ctcagggaga 180
gggaaccag aagcctggca tgctggccaa aggagtcaag gaaacttttg agctatttac 240
agcttgtagc aattatgtaa agnatactcc nctgaacaaa atttgagca tgtttgttnc 300
tctctacctg attt                                     314
```

<210> 99

<211> 679

<212> DNA

<213> Homo sapiens

<400> 99

```
agttgttccg tgtaggctgt tgttgactct cgtatgaaag cccacgcgat ccaagtgcc 60
tgcaggtttt ggtccaggga aaagttggtc tctgcagatg actgtaaag actacctgga 120
ggtcgattaa agtgcggtac tgcgggattc arccgatttc cttcttcctc tgactgccc 180
gaaatatcag ccaaaggcca gcgttctaag gacatatgga attggctatg gataattcat 240
atgctttcaa tcaacgaagc acatgtaatg gaattccatc tgagaagaaa aacaacttcc 300
ttgtatcaga agatcatgga caaaaaatct taagtgtact acagaatttt agagaacaaa 360
atgtctttta tgatttcaaa ataattatga aagatgaaat aatcccgtgt catcgttgtg 420
tgtttagcagc atgcagtgac tttttcaggg ctatgtttga agtaaagca aaagaaagag 480
atgatggaag tgttaccatt actaatttgt cctccaaggc agtaaaagca tttctcgatt 540
atgcctatac tggaaaaaca aaaataacag atgataatgt ggaaatgttc ttccagttgt 600
catcatttct tcaagtttcc ttcctatcca aagcttgag tgacttttta ataaaaagta 660
ttaatcttga aaaaaaaaaa                                     679
```

<210> 100

<211> 599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (584)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<400> 100

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aattcggcac gagtctcacc cctcggagac gctcgcccga cagcatagta cttgccgccc 60
agccacgccc gcgcgccacc accatgctag gtaacaagcg actggggctg tccggactga 120
ccctcgccct gtccctgctc gtgtgcctgg gtgcgctggc cgaggcgtag ccctccragc 180
cggacaaccc gggcgaggac gcaccagsgg agggacatgg ccagatacta ctcrgcgctg 240
```

cgacactaca tcaacctcat caccaggcag agatatggaa aacgatcyag cccagagaca 300
ctgatttcag acctcttgat gagagaaagc acagaaaatg ttcccagaac tcggcttgaa 360
gaccctgcaa tgtggtgatg ggaaatgaga cttgctctct ggccctttcc tattttcagc 420
ccatatttca tcgtgtaaaa cgagaatcca cccatcctac caatgcatgc agccactgtg 480
ctgaattctg caatgttttc ctttgtcatc attgtatata tgtgtgttta aataaagtat 540
catgcattca aaaaaaaaaa aaaaawaaaa aaaaaaaaaa acnngggggg gggcccccgn 599

<210> 101

<211> 1189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (232)

<223> n equals a,t,g, or c

<400> 101

gggggcggga aggcgtgacc gccatgcaca agctctttga ctgggccaat accagccggc 60
gcgggaggag ataagcaagg acctcagagc cactactgaac gccttcctgt accacatggg 120
ccaacacagc aacaaattca tgctggtcct ggccagcaat ctgcctgagc agttcgactg 180
tgccatcaac agccgcattg acgtgatggt ccacttcgac ctgccgcagc angaggagcg 240
ggagcgcctg gtgagactgc attttgacaa ctgtgttctt aagccggcca cagaaggaaa 300
acggcgcctg aagctggccc agtttgacta cgggaggaag tgctcggagg tcgctcggct 360
gacggagggc atgtcgggcc gggagatgcg tcagctggcc gtgtcctggc aggccacggc 420
atatgcctcc aaggacgggg tcctcactga ggccatgatg gacgcctgtg tgcaagatgc 480
tgtccagcag taccgacaga agatgcgctg gctgaaggcg gaggggcctg ggcgcggggt 540
cgagcacccc ctatccggag tccaaggcga gaccctcacc tcatggagcc tggccacgga 600
ccctcctac ccctgccttg ccggcccttg cacatttagg atatgctcct ggatggggac 660
tgggctgtgc ccagggcctc tgtccccag gatgtcttgt ggtggcggtc ggccgttctg 720
ccccccaggg caccocctgt tgtaggcact ggctaggag gggcaggcct ccttcctgcc 780
cctcgagaca ctcttgggag atgcattttc cgtctggctc acagggggag ggtgaggctt 840
tgtaccccag cccctgcccc ggccactgtg aggggtgggtg ctggctgagc ccctggggca 900
gaaggagtgg ggcaggcggg gtctttgttc tcggctccca cagcagagcc aggtgagggg 960
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ggccacgga acccggcagg ggtgtctgag gccgcctgt cagctggccg gtccaagcct 1080
gtggctggag ctggtgtgtg tttatctaataaagtccac aggtgcctca aaaaaaaaaa 1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1189

<210> 102

<211> 251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<400> 102

gccaatgtga tgaagtgcaa agttcaggcc ggtatgattt tnagtgtctg caaagataaa 60

agcttcgatg atgaagaatc agtggatgga aataggccat catcagctgc atcagccttc 120
aaggttcctg cactaaaaca tccggaaatc ctgccaacag tgcaaggag ctggttcagc 180
agggtggcct aaggttkgag gttstaaatc catttcaatc tgtratgctg gtccatggcc 240
ttgatattgg c 251

<210> 103

<211> 458

<212> DNA

<213> Homo sapiens

<400> 103

gggaggcttt ctgaattatg ggggcaacat ggggagactg ggctttctgt ggaccatgac 60
agctccgcag ccgtgctggg ctctcagct ccactgtcag ggctaggaat tggccacaga 120
acccccagag ccaaccctgg ggcccactag gaccccaaac acctgtgttt tcattctgcg 180
tggcctcctg gttccctgga gttctttttt atgctgcctc tgggtgtgagg tcctcagcat 240
ttaatttggt ctaagtttaa aagctgcaag agcaaaacag aacccccaaa gcctggggcc 300
cacagctgct gcggctgac agagatacga cccagagga ccacgtccac cargggccgg 360
atggacagcc acctattttg tamtccttgt ttcaaaagca acaatagcaa ataacattcc 420
aaaagttcta tgaatragact tcaagacact aggattta 458

<210> 104

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (402)

<223> n equals a,t,g, or c

<400> 104

tgtgtgtccg cgcaggcgag caccgcgccg gccctgagcc tcccgcctgc tccccacggc 60
cgcggtgcat gttcgccctc tgccactgtg tgccgagagg caggaggacc atgaaaatga 120
tccactttcg gagctccagc gtcaratcgc tcagccggag atgagatgca ccatccggct 180
gctggacgac tcggagatct cctgccacat ccagagggaa accaaagggc agttttctcat 240
tgaccacatc tgcaactact acagcctgct ggagaaggac tactttggca ttcgctatgt 300
ggacccagag aagcaaaggc actgggcttg aacctaacaa gtccatcttc aagcaaatgn 360
aaactcatcc accatacacc atgtgcttta gagtgaattt anccacatga acccttgaag 420
attaaagaag actcacaag 439

<210> 105

<211> 233

<212> DNA

<213> Homo sapiens

<400> 105

```
tcccaaagtg tggggattat aggcattgagc cactatgcc agcctacttt tgtttttaag 60
aaattgaaac gatatagaaa agtacaaaga acaacctaataaacactcat attcccacca 120
ctcagaatta tcaacttttt atcattttat catatttgct tcagatcttt ttttttttta 180
aagaaaagta taacagattt agctaaagta ccctttgacc aataccccac ccc 233
```

<210> 106

<211> 704

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 106

```
ggcagcgggtg gccgaggcct cttggttctg cggcacgtga cggtcgggcc gcctccgcct 60
ctctctttac tgcggcgcg ggcgaagggtg gcgggcggga aggggcacgg gcacccccgc 120
ggtcycyggg aggctagaga tcatggaagg gaagtgggtg ctgtgtatgt tactgggtgt 180
tggaactgct attgttgagg ctcattgatg acatgatgat gatgtgattg atattgagga 240
tgaccttgac gatgtcattg aagaggtaga agactcaaaa ccagatacca ctgctcctcc 300
ttcatctccc aaggttactt acaaagctcc agttccaaca ggggaagtat attttgctga 360
ttcttttgac agaggaactc tgtcaggggtg gattttatcc aaagccaaga aagacgatac 420
cgatgatgaa attgccaaat atgatggaaa gtgggaggta gaggaatga aggagtcaaa 480
gcttcagggt gataaaggac ttgtgttgat gtctcgggcc aagcatcatg ccattctctgc 540
taaactgaac aagcccttcc tgtttgacac caagcctctc attgktcagt atgaggktaa 600
tttccaaaat ggaatagaat gtggtggtgc ctatgtgaaa ctgctttcta aaacaccaga 660
actyaamctg gatmakgtts agaggactat aaactgcctt catn 704
```

<210> 107

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (426)

<223> n equals a,t,g, or c

<400> 107

```
ggaatacccc ctcaattctg tggcttcttt cctgtagtag acgatcaagg gtggaatcta 60
cagtccatgg gccctgactt cttgccttcg tctcaaatag actctgcagc cagccatcta 120
tgacgcgccc cagtggcttt gaaatgcaac agaaaccatc acccccgga catgggctcc 180
atgccagtgg gcaaagcaca ggtgcgttca ctgagttccc agcacatagc tgtggcaggc 240
acttggtgat attttgaaat aaaagaatgg aagaatgtgt ccaagctgtg cttccccctt 300
ctaccttact caggacatg gtgccctcct ctctggttyc ctgccctgtg ccamcccccg 360
scccctgcaa gcacagytct tatgtgcaaa gccctgttaa gtgctggagg gattactgat 420
ggcttngggg aagtggcaat gggaat 445
```

<210> 108

<211> 592

<212> DNA

<213> Homo sapiens

<400> 108

```
accaaaactg cacaagata gaaacagggg cttctgtgct ccttgagctt cacgtgttaa 60
cctgggtccc cagaccaaag accaacaccg caggggtgagt tcatcctctg ccaacagcaa 120
tctttccctt cctctgaggc cagccatccc catcccagga ggcaggggaa gcaagcccgg 180
ggagggcagg agagctcca gctcagtga gacgtccac cggccccgaa gcacctcctt 240
tgctcacagc tcrgasccca gcttctccct gctgcmaagr taactgcagc yttcagactg 300
acttccatgc ccctctagct agggscatc acttcaagtt caggcgccaa aaaccaagaa 360
agtaaatac acttcataga ctttatttac cttaaaaaat tcctgagttc attcatgtct 420
ccaaaccact agagaacctg aaaattcacc aggaaattgg gcaactgcaa gttatcctgg 480
agactccaga gtcaacactt cattaaatga gaacaatctg gttcatgcgt tgaagctgtt 540
acagtaatca gggcgacatg ggcaggggaa gcgatttttc tgaagctgtg cc 592
```

<210> 109

<211> 381

<212> DNA

<213> Homo sapiens

<400> 109

```
tcaccttgta gagaagaaag tcaacagata atttctaaat tggaaaatca ggaaattaca 60
gtcattataa gagatatatg gggaggatat aaataccaga ataaaaagat aaaagagatg 120
aaaatagtag tctctgggga gctaaagtct aaaatacaaa ggtgtgaggc agaccttata 180
tactacttaa cttgtatact atttatagcc cagtattctg ttttctagac ctgtccaggt 240
gttaagggat ccaatctatg aaccagcaga gacccaatga ctaaagmcaa actttgctgc 300
acactgaaat cacctggggg aatcttttaa aaagtactga cgcttgactc ccaccacaa 360
acagtctgat ttaattgggc a 381
```

<210> 110

<211> 351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (253)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (322)

<223> n equals a,t,g, or c

<400> 110

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ctgtccctgc actccgtggc ggaaggcggc tagagcggct ccctctgagc tctccgagag 60
attggtcggg acctgaagcg ttgaggttaa gggcaaggca aggagcaacg aggagttttt 120
cgttacgtta gaaaaatttc gttgcgtgct gaaagcgctt ttacctgtgt tgtatgattt 180
aaccttatga aaatggacag tatttccagt ttacaagtg aggaaagaag attaagaaac 240
ttgcctccgc cangcgtggt ggttcaactc ctgtaatccc agcactttcg gcggccgaag 300
caagcggatc acttgaggtc angagttcga agaccagcct gggccaaaca t 351
```

<210> 111
<211> 1583
<212> DNA
<213> Homo sapiens

<400> 111
gggggcccga ggagatgacg gccggcggcc aggccgaggc cgagggcgct ggcgggggagc 60
ccggcgcggc gcggctgccc tcgcgggtgg cccggctgct gtcggcgctc ttctacggga 120
cctgctcctt cctcatcgct cttgtcaaca aggcgctgct gaccacctac ggtttcccgt 180
caccaatttt ccttgaatt ggacagatgg cagccaccat aatgatacta tatgtgtcca 240
agctaaacaa aatcattcac ttccctgatt ttgataagaa aattcctgta aagctgtttc 300
ctcwgccctt cctctacgtt ggaaaccaca taagtggatt atcaagcaca agtaaatata 360
gcctaccgat gttcacogtg ctcaggaaat tcaccattcc acttacctta cttctggaaa 420
ccatcatact tgggaagcag tattcaactca acatcatcct cagtgtcttt gccattattc 480
tcggggccttt catagcagct gggctctgacc ttgcttttaa cttagaaggc tatatttttg 540
tattcctgaa tgatatcttc acagcagcaa atggagttaa taccaaacag aaaatggacc 600
caaaggagct agggaaatac ggagtacttt tctacaatgc ctgcttcatg attatcccaa 660
ctcttattat tagtgtctcc actggagacc tgcaacaggc tactgaattc aaccaatgga 720
agaatgttgt gtttatccta cagtttcttc tttcctgttt tttgggggtt ctgctgatgt 780
actccacggt tctgtgcagc tattacaatt cagccctgac gacagcagtg gttggagcca 840
tcaagaatgt atccgttgcc tacattggga tattaatcgg tggagactac attttctctt 900
tgttaaactt tgtaggggta aatatttgca tggcaggggg cttgagatat tcctttttta 960
cactgagcag ccagttaaaa cctaaacctg tgggtgaaga aaacatctgt ttggatttga 1020
agagctaaag agtctgcagc aggattggag actgacttgt gactgcgggc tgggggggca 1080
ttcccagtag gaatgtgaag ccagagggtt cggattcgtg acatccaccc cctgggcaag 1140
tgagagcatc tgcaaaatgc aaagagaact acctcatatg caggatgagc caatggcagt 1200
ctcaagaaat gtactcgggc gacaccttac ctgtggaaag caaatctttt caaaataagc 1260
cactgggact cggtaggtgg agccccagct gctcttctag ggacctatgg ggccttcgtg 1320
gcatctctgt gctgtgtgct ggggaggagg ttgatgtaat ggtgactctt ttctgatcag 1380
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acagacatgt ctttagtcta ataaaattag ttaactgcca gtaaagttaa ttgttagctt 1500
tgatgaaagc tatgttggtg tctttcccta atcatcaaag taaataaaaa atcatttcta 1560
aaaaaaaaaa aaaaaaactc tga 1583

<210> 112
<211> 431
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (408)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 112

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ccggcagcta gagcagctac tgactctgtt tcagccatct tcgataaagg caaaaaggta 60
agggaaagt tccaagcttt aggaagaatt attttttttc aagacgctgt cttccgtact 120
ttcgttatta aacatacggc tcaagtgatc accggtatag acagtgacat cagacatctt 180
tcattagccc tactcaaaaa tggcggcaac gtaatatcct gggccggagt cggttgtaac 240
ccggaagtgc ctttgtaaag gaggggtggt tagacaatcc ggaartggat ggaatgaaga 300
gatgccactt ggcggcccat ggcagctgtt agtatcgcg actccgggtm aaggcccgt 360
csagttgcat taccatgggg cagcaccngg ttttaggggc agggacantt ttgttgttca 420
anttgttgct g 431
```

<210> 113

<211> 2842

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2040)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2603)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2656)

<223> n equals a,t,g, or c

<400> 113

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ggtggactcg gagtccgcga gcgctcgctcg caagcggccg cctttccacg gtactccgag 60
cactatgtcg tccccggcgt cgaccccgag ccgccgcggc agccggcgtg gaagggccac 120
ccccgcccag acgcctcgga gtgaggatgc caggatcatc ccctctcaga gacgtagagg 180
cgaggattcc acctccacgg gggagttgca gccgatgcca acctgcctg gagtggacct 240
gcagagccct gctgcgagc rctgctgtt ttccagccct ccccaaagtc attcttcagc 300
tatccctctt gactttgatg ttagttcacc actgacatac ggcaactcca gctctcgggt 360
agagggaaacc ccaagaagtg gtgttagggg cacacctgtg agacagaggc ctgacctggg 420
ctctgcacag aagggcctgc aagtggatct gcagtctgac ggggcagcag cagaagatat 480
agtggcaagt gagcagtctc taggccaaaa acttgatgatc tggggaacag atgtaaatgt 540
ggcagcatgc aaagaaaact ttcagagatt tcttcagcgt tttattgacc ctctggctaa 600
agaagaagaa aatggttgga tagatattac tgaacctcta tacatgcaac gacttgggga 660
gattaatgtt attggtgagc cattttttaa tgtgaactgt gaacacatca aatcatttga 720
caaaaatttg tacagacaac tcactctcta cccacaggaa gttattccaa cttttgacat 780
ggctgtcaat gaaatcttct ttgaccgtta ccctgactca atcttagaac atcagattca 840
agtaagacca ttcaacgcat tgaagactaa gaatatgaga aacctgaatc cagaagacat 900
tgaccagctc atcaccatca gcggcatggt gatcaggaca tcccagctga tccccgagat 960
```

```

gcaggaggcc ttcttccagt gccaaagtgtg tgccacacag acccgggtgg agatggaccg 1020
cggccgcatt gcagagccca gtgtgtgcgg gcgctgccac accaccaca gcatggcact 1080
catccacaac cgctccctct tctctgacaa gcagatgata aagcttcagg agtctccgga 1140
agacatgcct gcagggcaga caccacacac agttatcctg ttgctcaca atgatctcgt 1200
tgacaaggte cagcctgggg acagagtga tgttacaggc atctatcgag ctgtgcctat 1260
tcgagtcaat ccaagagtga gtaatgtgaa gtctgtctac aaaaccaca ttgatgtcat 1320
tcattatcgg aaaacggatg caaacgtct gcatggcctt gatgaagaag cagaacagaa 1380
acttttttca gagaaacgtg tggaattgct taaggaaactt tccaggaaac cagacattta 1440
tgagaggctt gcttcagcct tggtccaag catttatgaa catgaagata taaagaagg 1500
aattttgctt cagctctttg gcgggacaag gaaggatttt agtcacactg gaaggggcaa 1560
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cattgagctc cagtggaaac ctaaaaaac aaccattgaa aacatccagc tgcctcatat 1980
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gcttagcaga agcccatgct aaagtaagat tgtctaaca agttgaagcc attgatgtgg 2340
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gcatcgtgga catatctatt ctactacgg ggatgagtg cacctctcgt aaacggaaaag 2460
aagaattagc tgaagcattg aaaaagctta ttttatctaa gggaacaaac ccagctctaa 2520
aataccagca actttttgaa gatattcggg gacaatctga catagcaatt actaaagata 2580
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ccstgcgctt gctctngaag ccttgtgagc aaggaaggct ccctgcatgt cctgcttgct 2700
gcacgccaca tgggtgtggt ctgcatctca gttggccgcc atcagtgtaa atagagctta 2760
aagtcatggt ttggctgcat aaaaattttc taacttgggt tcaatatattg tagtgaagta 2820
tctgttttca tttttttcac gt 2842

```

<210> 114

<211> 268

<212> DNA

<213> Homo sapiens

<400> 114

```

attttgctgc tgggtgggtg ggctacagca ggctctctga gccacaccag ggcacgggag 60
tgggtgcagg gaccgtcacc gcgccttcac acgcaccata gtgcccggct aattactctg 120
cttttatgag ccaaggtgtt cccgaaagtg garccagcgc cacgcgtctc yaaggtctcc 180
ataccagcc ttctgccttg cgggtgcccc aagccttgcg cgcattttgc atttgggaaa 240
aaaagtcctg aatgcgaacg tcacccca 268

```

<210> 115

<211> 800

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (794)
<223> n equals a,t,g, or c

<400> 115
gcgctcggggc ttcggaggcg tgcgggcttc ggaggcgtgc gggcttcgga ggcgwgcggg 60
cttcggaggc gtgcgggctt cgggtgccat ggggactcct cccggcctgc agaccgactg 120
cgaggcgctg ctccagcgct tccaggagac ggacagtgtg cgcttcgagg acttcacgga 180
gctctggaga aacatgaagt tcgggactat cttctgtggc agaagagaa atttagaaaa 240
gaacatgttt acaaaagaag ctttagcttt ggcttggcga tattttttac ctccatacac 300
cttccagatc agagttggtg ctttgtatct gctatatgga ttatataata cccaactgtg 360
tcaacaaaaa caaaagatca gagttgccct gaaggattgg gatgaagttt taaaatttca 420
gcaagattta gtaaattgcac agcattttga tgcagcttat attttttagga agctacgact 480
agacagagca tttcacttta cagcaatgcc caaattgctg tcatatagga tgaagaaaaa 540
aattcaccga gctgaagtta cagaagaatt taaggaccca agtgatcgtg tgatgaaact 600
tatcacttct gatgkattar aggaaatgct gaatgggtcat gatcattatc agaacatgaa 660
catgtaattc agntgataaa gtccaagcca gataaggcct taacttgata aaggatgatt 720
tttttgacaa tattaagaac atagtttttg agcatcagca gtggcccaaa gaccgaagaa 780
tccatcctta aggncaaaac 800

<210> 116
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (556)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (592)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (615)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (645)
<223> n equals a,t,g, or c

<400> 116

```

aacaaaggca ttgccatcta caagaaggat ttcttcctgg tgcagaagct ggtgagctgg 60
gctctgtttc agggcaaatg agggccagga gctgcctgtg tgactttggg gctccctctg 120
ccagtgacca atccctctta aaaagcagtc aggtcaatgc tactgagtag cctcagagag 180
aatttcctaa acaatacaag aaagagaaag atagggtctct tttccctttt ggttctaagc 240
atccttttct cacttcaggg taggggtggc aagctctggg gtctcaatcc agaaggaggc 300
ctaagtgggc atcagactta aaataggcag gaggaagatg cggaggaggg tggcaaktgag 360
aggtgagcca ttcccagag gaagatgcag ggggagggca ccctggggtg aaggccactg 420
agagccagca agtgcctgcg gactgacctg ggggcctctg cccacttctt ttgaccaga 480
gttgccctcc agtaactcag ctgttcaagc ccacattccc taagatttat cttgtcctct 540
ctcccatatt cttctnggaa aagcagatgc tttgctaata ccaaggaatt gnattttttc 600
cagccctggt ttcanaaaaat ctggggcttt ggggaaaaaa aattnt 646

```

<210> 117

<211> 1534

<212> DNA

<213> Homo sapiens

<400> 117

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gcgacctcgg ccataagcgc ctgcgcagtc gcggggcccgc cggccgtgct gttcccgcga 60
attcctgtgg taatccttac cgtggcgagt tccgcgctca atggagacgt ttgacccac 120
cgagctgccc gagctgctta aactttatta ccggaggctc tttccctact ctcagtacta 180
tcgctggctc aactacggtg gagtgataaa gaattacttt caacaccgtg aattttcatt 240
cacattgaaa gatgatattt acattcgcta ccaatccttc aacaaccaga gtgatctgga 300
aaaggagatg cagaaaatga atccatacaa gattgatata ggcgcagtat attctcacag 360
acccaatcaa cacaatacag tgaagctggg agctttccag gctcaggaaa aagaactggt 420
at ttgacatt gacatgacag actatgacga tgtgaggaga tgttgtagtt ctgcagacat 480
atgtcctaag tgctggaccc tcatgacaat ggccatacgc atcattgaca gagcattgaa 540
ggaggacttt ggatttaagc atcgtctctg ggtatattct ggaaggagag gtgttcattg 600
ttgggtctgt gatgaatcag ttagaaactg tcttctgcar tacgttcygg gatagttgag 660
tatttgagcc ttgtaaaggg tggtaagac gttaaaaaga aagttcacct aagtgaaaaa 720
attcaccctt ttatcagaaa atctataaac ataataaaaa aatactttga agaataatgcy 780
ttggttaatc aagatattct cgaaaataaa gaaagctggg ataagatttt agcccttgtc 840
ctgaaacaat tcatgatgaa cttcaacaaa gcttccaaaa gtctcacaat tcacttcagc 900
gttgggagca cttgaagaaa gtagccagca gatatcagaa taacatcaaa aatgacaaat 960
atggaccctg gctggagtg gaggattatgc tccagtactg ttttccacgg ctggatatca 1020
atgtcagcaa aggaatcaat catctactga agagcccttt tagtgttcat cctaaaacag 1080
gtcgcattmc tgtgcctatt gatttgaga aagtggacca gtttgatcca tttactgttc 1140
cgaccataag cttcatctgc cgtgaattgg atgccatttc cactaatgaa gaggaaaaag 1200
aggagaatga agctgaatct gatgtcaaac atagaaccag agattataag aagaccagtc 1260
tagcacctta tgtgaaagtt tttgaacatt ttcttgaaaa tctggataaa tcccgaagag 1320
gagaacttct taagaagagt gatttacaaa aagatttctg aagacagagc tcctcaaacc 1380
attgtggata tcttctgcct tcaaccacag atcaaatact tcaagagcca tttaataaat 1440
atggcagaac tatatatgtg tcttaaacct caaagtaaat tttccttgag aaataaaaaa 1500
aaaaaaaaa aaaaaagtcg agactagttc tctc 1534

```

<210> 118

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (155)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c

<400> 118
tagatgaaga taatgaaaaa gaaaaaaggg actcttttagg caatgaagaa tctgttgata 60
aaacagcatg tgaatgtgta aggagtccaa gggagtcttt ggatgacctg tttcaaatat 120
gttctccatg cgccattgca agtgggtcttc ggaanacctg gctgaattga caacattatg 180
tttgaggttg aatgtattga attctaagat caaaagcacc agtggracat gtgggaccac 240
actttgccaa cagtaactct cctgaaattc tgggcttgcc atttccttga aagaagtact 300
tttttcntcc ggaacttgga aaagagcgaa ggnagagta 339

<210> 119
<211> 665
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (616)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (656)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (665)
<223> n equals a,t,g, or c

<400> 119
aaagagtgtc cctagtgtgta acagaaactg tcgatgcagg tttatttgga gaaggaattg 60
tggagagttt gattcatgca tgggagcatt tactttttaca gccaaagacc aaaggtgaaa 120
gtgctaattg tgaaaagtat gggaaaagtta taccagcaag tgctgttata tttgggatgg 180
cagtagaatg tgcaagagata agaagacatc atagagtggg tattaaggac attgctggta 240
tccatttgcc aacaaatgtg aaatttcaga gtccggctta ttcttctgta gatactgaag 300
aaacaattga accttataca actgaaaaga tgagtcgagt tcctggmgrp tatttggctt 360
tgacagagtg ctttgaaatt atgasagtag atttcaacaa ycttcaggaa ttaaaaagtc 420
ttgcaactaa raarcctggt aaaattggta ttctgtttat taaagaaggc atattagatg 480

```

ctgttggtgtt ttggtttgta ctccagcttg atgatgaaca tagtttatcc acaagtccta 540
atgaggaaaac atgttgggaa caagctgtct accctgtaca tgaccttgca gactaccgga 600
taaaacgtgg ggaccngtga tgatggaatg tcttggtccaa gattgttact taagantcca 660
gaatn                                         665

```

<210> 120

<211> 622

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (544)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (603)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (614)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (620)

<223> n equals a,t,g, or c

<400> 120

```

gagggctgcg ggaggcggga ggaaaaagtg gggccggggc tgagttgggc tgacctgtga 60
aagtctggga aggtctgcga gagaagcgga gtgttttcag ctccggaagt ggcagttgta 120
aacttcacct cccgggggct cttccccttc tgtaccctt tgctgtttgt cccctcctc 180
ccgggtcctg gagtcgctcg tgttccaaca gtttttgctc ttattcccgt gggctgctgg 240
gcctcctttc acccgtgaga cttggarcgg ccctggggtc ttgggtgtca agcacggatc 300
acgcgagacc cctgagacct caaatcatct aacgtgaagc cacagacatc ttggcaattt 360
taatcatcaa gaaagaaata tgtcattaag aaatagcagg gtattttgaa agaagttgga 420
aaacatcatg aatttgaata ctttaagtaa tactgggtgat acccaaagg tgaagattgc 480
ctcattggat gtaaaacaaa tacttaaaaa tgaacacagag ttggatatta ctggataatc 540
tcan gaagaa actccattgg gctaaaaaag aaaagtntga aataccacca accccatgga 600
aancttgcaa gctntgaagn ca                                         622

```

<210> 121

<211> 889

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (830)

<223> n equals a,t,g, or c

<400> 121

```
ggctgaagcc atccccttgg ctgatcagcc acatctgttg cagccaaatg ctagaaagga 60
ggatcttttt ggccgtccaa gtcagggtct ttattcttca tctgccagta gtgggaaatg 120
tttaatggag gttacagtgg atagaaactg cctagagggtt cttccaacaa aaatgtctta 180
tgctgccaat ctgaaaaatg taatgaacat gcaaaaaccgg caaaaaaaaag aaggggaaga 240
acagcccgtg ctgccagaag aaactgagag ttcaaaacca gggccatctg ctcatgatct 300
tgctgcacaa ttaaaaagta gcttactagc agaaatagga cttactgaaa gtgaaggggc 360
acctctcaca tctttcaggc cacagtgtag ctttatggga atgggtatatt cccatgatat 420
gctgctagga cgttggcgcc tttctttaga actgttcggc aggggtattca tggaagatgt 480
tgagcagaaa cctggatcaa tcctaactga attgggtggg tttgaggtaa aagaatcaaa 540
attccgcaga gaaatggaaa aactgagaaa ccagcagtca agagatttgt cactagaggt 600
tgatcgggat cgagatcttc tcattcagca gactatgagg cagcttaaca atcacttttg 660
tcgaagatgt gctactacac caatggctgt acacagagta aaagtcacat ttaaggatga 720
gccaggarar ggtagtggtg tagcacgaag tttttataca gccattgcmc aagcattttt 780
atcaaatgaa aaattgccma atctagagtg tatcccnaaa aaaaaatttn ggcccccca 840
aaaaccctaaa aaaaaggggc caaccccca ccaccaagg gtttttttaa 889
```

<210> 122

<211> 132

<212> DNA

<213> Homo sapiens

<400> 122

```
cttgagcccc tgagttgtgg gggtaggggtg aagagcatat cccacaagag gccccacagg 60
gagcagagac tgctttaatc cctgctgaca tcacggaaaa gcaacagagc cttttcaact 120
ttgtcactat gt 132
```

<210> 123

<211> 1900

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1879)

<223> n equals a,t,g, or c

<400> 123

```
gcggacgcnt gggaaacagc cgattggaga cgggagccaa ccagggctgc attggaggtt 60
gaaatcacaa agattagaca cttttttaga taggtgttct tcagcaccac tgacaacacg 120
gttctgacag tatttcatga caatggatgg tgacagttct acaacagatg cttctcaact 180
aggaatctct gcagactata ttggaggaag tcattatgtt atacagctc atgatgatac 240
tgaggacagc atgaatgatc atgaagacac aaatggttca aaagaaagt ttagagaaca 300
agatatatat cttccaatag caaacgtggc taggataatg aaaaatgcc aacctcaaac 360
gggaaagatt gcaaaagatg ccaaagaatg tgttcaagaa tgtgtaagt agttcatcag 420
ttttataaca tctgaagcaa gtgaaagggtg ccatcaagag aaacggaaaa caatcaatgg 480
agaagatatt ctctttgcta tgtctacttt aggctttgac agttatgtgg aacctctgaa 540
attatacctt cagaaaattca gagaggctat gaaaggagaa aagggaattg gtggagcagt 600
cacagctaca gatggactaa gtgaagagct tacagaggag gcatttacta accagttacc 660
agctggctta ataaccacag acggtcaaca acaaaatgtt atgggtttaca caacatcata 720
tcaacagatt tctggtgttc agcaaatca gttttcatga tctgaagaaa tgatggaatg 780
gggagtgtag agaaatgaga gtctgtatga ttctggaaca gagacatcag aaggaaagac 840
tggtgaaaaa atgtatcttt gtatattaat agctgtaatg tagcttcctg atgcttgact 900
aattgagggtg ttaattctga cttgagaatc tttttcatga atgattttta agaaaaattt 960
ggatttttaa ggtattaaaa tatttttggt ttgtacgaga gtttggttgc ctgtatgact 1020
cctgtatgca ttgtatattg caatttatta ctgtcagaga tttgtagaca gtttcttatt 1080
ttcatattga atcatgttac ttttgtaatt caagtaagcg gctgggttaa ttcattgatg 1140
ttgccctttt aataaaaatat aagggtagag ttcattttga atgcaagttg cttttattat 1200
aaatttgagt ttgtcttggt tataccttgc atgataacct agctagattt ctagcatttg 1260
ctgtatttat taaaattatt atttttttgg taaaacatta atagttaaag cagcatcatt 1320
tttttaaaaa atgtaattga ataagtgtga atgcagaagc aaatattgtc tgccctgtta 1380
aacttggtgc ccattaacag tgtttacact gttcatcgtg cctgttaatg tagttttagt 1440
taytgagct tttttaagac tagatttggt tttagattac atttttaaga atgtgggaat 1500
atatttaagt ttaatgtagt cctagtgtc ttgaaatggt gcccttttca tttggtacat 1560
gatttttttt caaatcatat cttcaagtac tatagtattc tcttacagaa gaggagtttt 1620
atagtctgat ggtaaagtgc ttcattttac ctttttaatt gaaatgtcaa gtttcctgtt 1680
acactatgga aaccaagaaa catcagacat cattgcgtgt acagacctt tgcatgggtg 1740
agtggatgaa atggagaaca gagtgagtgc tgtgaacggt gtgaaataga agccaacttc 1800
tagtatgctg tcttcatctc tgcaataaac taaacgtaaa taawrwaaaa aaaaaaaaaa 1860
aaaaaaaaa aaaaaaana aaaaaaaaaa aaaaaaaaaa 1900
```

<210> 124

<211> 1250

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (874)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1169)

<223> n equals a,t,g, or c

<400> 124

```
ggcacgagga ggaaactaac gattccctgc ccacccccac acccagcacc accaacaggt 60
gggcaagctt gccgagaaaa cgcagagggc atcctgtgag cagcaaacac atctgagcct 120
ggaaaagacg cagagaagta aaagatcaaa gtctgattgg caccggctcc cattccggct 180
ccagcctcca atccgacccc catttcggct gcagcctcgg acctagctcc ggccctcgg 240
ctatccggtt gcatcctccc tccctgttcc ggatcttata ttgcgccagc gcctactcca 300
ggatcccgtg gccagacctc aagccatggc tggcccttc tcccgctcgc tgtccgcccg 360
cccgggactc aggtccctgg ctttgggcgg agcggggtct ctagccgctg ggtttctgct 420
ccgaccggaa cctgtacgag ctgccagtga acgacggagg ctgtatcccc cgagcgctga 480
gtaccagac ctccgaaagc acaacaactg catggccagt cacctgaccc cagcagtcta 540
tgcacggctc tgcgacaaga ccacaccac tggttggacg ctagatcagt gtatccagac 600
tggcggtggc aaccctggcc accccttcat caagactgtg ggcatgggtg ctggagatga 660
ggagacctat gaggtatttg ctgacctgtt tgaccctgtg atccaagagc gacacaatgg 720
atatgacccc cggacaatga agcacaccac ggatctagat gccagtaaaa tccgttctgg 780
ctactttgat gagaggtatg tattgtcctc tagagtcaga actggccgaa gcatccgagg 840
actcagctcg cctccagctt gcactcgagc agancgacga gaggtggaac gtgttgtggt 900
ggatgcactg agtggcctga aggtgacct ggctggacct tactataggc tcagtgaagt 960
gacagaggct gaacagcagc agcttattga tgaccacttt ctgtttgata agcctgtgtc 1020
ccggttgctg actgcagcag gaatggctcg agactggcca gatgctcgtg gaatttggca 1080
caacaatgag aagagcttcc tgatctgggt gaatgaggag gatcatacac gggatgatctc 1140
catggagaag ggtggttaaca tgaagagant gtttgaaaga tctgccgagg cctcaaagag 1200
gtrgagagac tatgtagggg actaggtggg aggacataag gaaaaccaa 1250
```

<210> 125

<211> 1189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1041)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1136)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1144)

<223> n equals a,t,g, or c

<400> 125

```
ctttttttaa cccttttaggt atctgatcgc tttgccaaatt ttgcgttact gggcaggcta 60
agagatcttc ttttaattca gcctgcttaa gacgggaact gataactgta gtgtatcctc 120
tgcccttttt cttatctatt ggaggaagct cagatgggtg cacaagaagg atctgaagtg 180
gagcttctag tatccccagg agcgcgaagt gaacacggaa ggtacctgca ggatccaatt 240
gtgtccattg atctctcaga gtggctgagg ataataagagt ttcttcttca aggtctcaag 300
gtctgaagca tccacagaa tgatcctact gaataactcc cataagctgc tggccctata 360
```

```

caaatccttg gccaggagca tccctgagtc cctgaagggtg tatggctctg tgtatcacat 420
caatcacggg aacccttca acatggaggt gctgggtggat tcctggcctg aatatcagat 480
ggttattatc cggcctcaaa agcaggagat gactgatgac atggattcat acacaaacgt 540
atatcgtatg ttctccaaag agcctcaaaa atcagaagaa gttttgaaa attgtgagat 600
cgtaaactgg aaacagagac tccaaatcca aggtcttcaa gaaagttag gtgaggggat 660
aagagtggct acattttcaa agtcagttaa agtagagcat tcgagagcac tcctcttggg 720
tacggaagat attctgaagc tcaatgcctc cagtaaaagc aagcttgga gctgggctga 780
gacaggccac ccagatgatg aatttgaaag tgaaactccc aactttaagt atgccagct 840
ggatgtctct tattctgggc tggtaaata caactggaag cgagggaaga atgagaggag 900
cctgcattac atcaagcgt gcatagaaga cctgccagca gcctgtatgc tcggcccaga 960
ggagatcccg gtctcatggg taaccatggg acccttcttg tgaagtagga atggcctaca 1020
gcatggaaaa ataccgaaga ncaggcaaca tgggcacgag tgatggtgcg atacatggaa 1080
atatctgcgt cagaaggaat atttccattt ttacatctct gtgttgggaa ggaaantgaa 1140
ggantccccg cagatttgtg gggggcagtt ttggttctt ttgaggcct 1189

```

<210> 126

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (388)

<223> n equals a,t,g, or c

<400> 126

```

gaggtcctga gagactgtra gagccccaac tccattagta ttatgggcct caatacttcc 60
cgggttgcaa ttaccctgaa gcccgaagac cctatggaac agaacgtagc tgagctggtg 120
cagttcctgc tgggtgaagga tcagagcaag taccctatcc gggagtctga aatgcgggaa 180
tatattgtta aagaatatcg caaccagttt cctgagatac tcaggcgagc agcagccac 240
ctggagtgca ttttttaggtt tgaattgaga gaacttgacc ctgaggcaca cacctacatt 300
ctgttaaaca aactgggacc tgtgcccttt gaagggttag aagagagccc aaatgggcca 360
aagatgggcc tcctgatgat gattctangc caaatattcc tgaatggcaa ccaagccaag 420
gaggctga 428

```

<210> 127

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (255)

<223> n equals a,t,g, or c

<400> 127

```

acgcggtcgg ccgggagccg gggaggagcg tggacgccgg cctggcaggt acccccgcga 60
gaacgtggga gccggtgtat ttcagctgca tttattactg atctcgggct gcaccagggc 120
actttagga ccgactaaa aacagcggaa agtgaggagc caagcctggg tccggggcgg 180
cccgccgtac agctggcctc acggattcca ctgcctgcgc ctgcagatga cttgttctgg 240
agagtagaga atgtnctcgg atttaaagta caatccggtt tcctttccat tcattatagt 300

```

```

tgcctacact caacaaacaa aagttgggaa agataaaggg attattctag cgcgtcacat 360
tgacaaacac cgacgttaac acgctcagtc cagcctgact cacttgccctc aggtcagaga 420
ggtcaccact gacgacgccg ggccctcaag ccgacccctaa tccagcttgg ttctctcagc 480
ctcagccaga ccatccgttc ttgcctctgt cccaccacgt gcaggtgtaa gytcccgccg 540
cacttcttgt ctgaatctgc caaggaagga aactggcatc tttcagctta aattcttttt 600
cacttgatca ggggtaggag tttaggcggt tttttttttt aagga 645

```

<210> 128

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (481)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (490)

<223> n equals a,t,g, or c

<400> 128

```

ctggagtctc aacgacgcgc acacgagaag taaggagcgg aaggtgggaa agggccggaa 60
aacacacggt cctccgaaac cggtttgcaa gtccttgtag agagtgatag attcgtgtgg 120
cctttcaaatt gattgtgaag tgggtggaaat ggatccaaaa taataagtga cttctctacc 180
aaagcataga agattcttca tatctccttc cagtggctca atttagattt tgggaargag 240
cagaacaagt gaaacacaga aaactgaaga gaagaaatcc tcatttttga cctatatattc 300
tccttgacta tttcttaata tccatcctac ccatcggttct aatgttttaa ctttgctctg 360
aatttataaa tagtaaaggc caaagacata gaatatacat ttagtagctt tataccaaga 420
aatttgccctt gaaagctgct gtscgtggag gggaaagtgt agcaaattcc tggcnatttg 480
naattttaan ttattg 496

```

<210> 129

<211> 424

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (313)

<223> n equals a,t,g, or c

<400> 129

```

ctggcgcccg caggagcgcg tgcggcggtg actttgccgg gctcgccaca cagccccaga 60
cccgtttagg accgggagac cgaacgcgac gwccagccgg ggagtttcgg cggcgttctc 120

```

cgggcaccgc gcgcggaagc cagacgcagc ggggggacac atctcgcggt ggcgttgcca 180
gagtgaggag ttagcaggca ggacttgacg aggctctttg gtttttctag tcctcaacca 240
ctgaagaaga agcttgatgc ttggctgtca gaagacatga attacgcacg gttcatcacg 300
gcagcgagcg cancagaaac ccttctccca tccggaccat gactgacata ttgagcagag 360
gaccaaatac gatgatctcc ttggctggtg gcttaccaaa tccaaacatg tttcctttta 420
agac , 424

<210> 130

<211> 1709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1028)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1168)

<223> n equals a,t,g, or c

<400> 130

tggaccgcag cttcctggaa gacacaaccc ccgccaggga cgagaagaag gtggggggcca 60
aggctgcccc gcaggacagc sacagtsatg gggaggccct gggcggaas ccgatggtgg 120
carggttcca ggacgatgtg gacctcgaag accagccacg tgggagtccc ccgctgcctg 180
caggccccgt cccagtcga gacatcactc ttctcagtgga ggaggaagca gaagtggcag 240
ctcccacaaa aggccctgcc ccagctcccc agcagtgtctc agagccagag accaagtggg 300
cctccatacc agcttcgaag ccacggaggg ggacagctcc cacgaggacc gcagcacccc 360
cctggccagg cggtgtctct gtctgcacag gtccggagaa gcgcagcagc accaggcccc 420
ctgctgagat ggagccgggg aagggtgagc aggcctcctc gtcggagagt gaccccgagg 480
gacccattgc tgcacaaatg ctgtccttcg tcatggatga ccccgacttt gagagcgagg 540
gatcagacac acagcgagc gcggatgact ttcccggtgcg agatgacccc tccgatgtga 600
ctgacgagga tgagggccct gccgagccgc cccacacccc caagctccct ctccccgcct 660
tcagactgaa gaatgactcg gacctcttcg ggctggggct ggaggaggcc ggacccaagg 720
agagcagtga ggaaggtaa gagggcaaaa cccctctaa ggagaagaag aagaagaaga 780
aaaaaggcaa agaggaagaa gaaaaagctg ccaagaagaa gagcaaacac aagaagagca 840
aggacaagga ggagggcaag gaggagcggc gacggcggca ncagcggccc ccgcgcagca 900
gggagaggac ggctgccgat gagctggagg ctttcctggg gggcgggggc cgggcggccg 960
ccaccctggg ggtggcgact acgaggagct ctaggccggc gtgggcagtg gccgccctgg 1020
ggcggggngc gtgcctgtca ctgcctgggg aggcatttgc ntctgtacca tcgcctttgc 1080

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cgctgccccg tggctgccgt gtgcgcttct gagctggaag aggccgggca ttggtggtcc 1140
ccaggctggg ccctgcaggt gctgggcntt cagccyagtg tgagcctgct ctgcaagaag 1200
ggaggggaca gctggcttca gccaggctcg gtggacaccc tggccctctc ggggcagagc 1260
cgccagtgtt tctcagggat gtgactgagg cccaggaggg acctgtgagg gtctgtttac 1320
agaggctggg cagggggcgc ttggctgtgg ggtgtgcgct gccccggcac ctgcttgccc 1380
tccgcgctca tctggggccg cagcatgcct atggttccgc ttccggccgg gagccctgaa 1440
cacgggtgtg cagactcacc ctaaaggcg gcccaggccc cacgctagaa ggctggcgag 1500
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agctgcgccc ccgctcaggt gagcccgaag gcaggagccg ggaggcactc ctcccaaaca 1620
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aaaaagggcg ccgctcgcga tctagaacc 1709
```

<210> 131

<211> 866

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (683)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (723)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (740)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (813)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (841)

<223> n equals a,t,g, or c

<400> 131

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ctcgctcgga ttggttcagt gcactctaga aacactgctg tgggtggagaa actggacccc 60
aggtctggag cgaattccag cctgcagggc tgataagcga ggcattagtg agattgagag 120
agactttacc ccgccgtggg ggttgagggg cgcgcagtag agcagcagca caggcgcggg 180
```

```

tccccgggagg cccgctctgc tcgcgccgag atgtggaatc tccttcacga aaccgactcg 240
gctgtggcca ccgcgcgccg cccgcgctgg ctgtgcgctg gggcgctggt gctggcgggt 300
ggcttctttc tcctcggett cctcttcggg tggtttataa aatcctccaa tgaagctact 360
aacattactc caaagcataa tatgaaagca tttttggatg aattgaaagc tgagaacatc 420
aagaagtctt tatataatct tacacagata ccacatttag caggaacaga acaaaacttt 480
cagcttgcaa agcaaattca atcccagtg aaagaatttg gcctggattc tgttgagcta 540
gcacattatg atgtcctgtt gtcctacca aataagactc atcccaacta catctcaata 600
attaatgaag atggaaatga gattttcaac acatcattat ttgaaccacc tyctycagga 660
tatgaaaatg gttcggatat tgnaccacct ttcagtgtt tctctcctca aggaatgcca 720
ganggcgac tagtgtatgn taactagcac gaactgaaga cttctttaa ttggracggg 780
acatgaaaat canttgctct ggggaaaatt gtnattgcca agatatggga aagttttcaa 840
naggaaataa ggggttaaaaa tgccca 866

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<210> 132

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 132

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gttgtagtga gctgagatca tgccactgca ctccaacctg ggtgacagag cgagactcca 60
tctcaaaaat aaataaataa ataaataaat aaaaccttaa tttgatggtg gttttatgtc 120
tgccatttcc atttagattc aaagaatcct aagaataatg gtggagcaaa gcttattttt 180
ctgttttttg aatcttgtaa ggcatggtgc caaacccaat gaaatggtgc caaaaagtcc 240
tgcagctgga actagagcta gagtctaagg gttctgatcc ttagctccaa ggccttctca 300
taaactcctt gacactttca cctccaaca cagtcagtca gtctctgttt ttctggttgg 360
gtttctatat aaaactttcc attttgagta atgatcttcc cctcttgctt tttctcttac 420
atattccaat aaagaccttt tttgtcttca actcctgtca cttggattcc aggacttctt 480
ccatccctca tgtttgttcc ttactttgcc agcctcggcc atttctgtat cccctgcct 540
gggkttgctg ccttttatgc tcctamctca ccaggtaaca ggaacatgaa gatggctata 600
tgcggctgca gctggttcgc tamgagagt tagagctgac acagcaactg ctgcggaac 660
cacaagaggg atcgggctgg gaacgtcgt gaacgagagc agcctgcarg gsattattct 720
agaaacagtg ccaggggagc caggacgtaa ggaagaggaa gaggagggca agggtagcga 780
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aaaaaaaaa aaaaaaaaaa aaaaaactcg tag 1593

```

<210> 133

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<400> 133

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actgtaccag ttaatctggc gtcagttcgt tgccctgccag atgaccccag cgaaatatga 120
ctccacgacg ctgaccgttg gtscggggcga tttccgcctg aaagcacgcg gtcgtatttt 180
gcgttttgay ggctggacaa aagtgatgcc tgcgttgctg aaaggcgatg aagatcgcat 240
cttaccagca gttaataaaag gcgatgctct gacgctcgtt gaacttacac cagcccagca 300
ctttaccaag ccgccagccc gtttcagtga agcatcgctg gttaaagagc tggaaaaacg 360
cggtatcggt cgtccgtcta nctatgcgtc gatcatttcg accattca 408
```

<210> 134

<211> 2741

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1673)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2736)

<223> n equals a,t,g, or c

<400> 134

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tccttgctga cyctccgaat ggccatggac tcgtcgcttc aggcccgcct gtttcccggt 120
ctcgctatca agatccaacg cagtaatggt ttaattcaca gtgccaatgt aaggactgtg 180
aacttggaaga aatcctgtgt ttcagtggaa tgggcagaag gaggtgccac aaagggcaaa 240
gagattgatt ttgatgatgt ggctgcaata aaccagaac tcttacagct tcttccctta 300
catccgaaga caatctgccc ttgcaggaaa atgtaacaat ccagaaacaa aaacggagat 360
ccgtcaactc caaaattcct gctccaaaag aaagtcttcg aagccgctcc actcgcatgt 420
ccactgtctc agagcttcgc atcacggctc aggagaatga catggagggtg gagctgcctg 480
cagykgcaaa ctcccgaag crgttttcag ttctcttcg gaggaatca tgtcttgatga 540
aggaagtggg aaaaatgaag gaacaagcga gaagagaaga aggcccagaa ytctgaawtg 600
agaatgaaga gagctcaggw gtatgacagt agttttccaa actgggaatt tgcccgaatg 660
attaaagaat ttcgggtac tttggaatgt catccactta ctatgactga tcctatcgaa 720
gagcacagaa tatgtgtctg tgtaggaaa cgcccactga ataagcaaga attggccaag 780
aaagaaattg atgtgatttc cattcctagc aagtgtctcc tcttggtaca tgaacccaag 840
ttgaaagtgg acttaacaaa gtatctggag aaccaagcat tctgctttga ctttgcattt 900
gatgaaacag cttcgaatga agttgtctac aggttcacag caaggccact ggtacagaca 960
atctttgaag gtggaaaagc aacttgtttt gcatatggcc agacaggaag tggcaagaca 1020
catactatgg gcggagacct ctctgggaaa gcccagaatg catccaaagg gatctatgcc 1080
atggcctycc gggacgtctt cctcctgaag aatcaaccct gctaccggaa gttgggcctg 1140
gaagtctatg tgacattctt cgagatctac aatgggaagc tgtttgacct gctcaacaag 1200
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aaggccaagc tgcgcgtgct ggaggacggc aagcaacagg tgcaagtggg ggggctgcag 1260
gagcatctgg ttaactctgc tgatgatgtc atcaagatgm tcgacatggg cagcgccctgc 1320
agaacctctg ggcagacatt tgccaactcc aattcctccc gctcccacgc gtgcttccaa 1380
attattcttc gagctaaagg gagaatgcat ggcaagttct ctttggtaga tctggcaggg 1440
aatgagcgag ggcgrkacac ttccagtgtc gaccggcaga cccgcatgga gggcgacagaa 1500
atcaacaaga gtctcttagc cctgaaggag tgcatacagg ccctgggaca gaacaaggct 1560
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aactctagga cttgcatgat tgccacgata tcaccaggca taagctcctg tgnaatatac 1680
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catacagcaa ggaccagact ggcttgagct ctctgagatg accgagcagc cagactatga 1980
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aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggggncccc c 2741

```

<210> 135

<211> 686

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (638)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (655)

<223> n equals a,t,g, or c

<400> 135

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tcttcctttt ttccgcctct cgttcgcttt tgtcttacga ggcttccgga acacggccca 60
gaattacaga gaaaacacac ctgcacgcgc actctctcgt acacgctgtg cggcttctgt 120
ttggttggcc agttcgtccc aatttccgac tcacaggctg cggagcagca actctcacga 180
tatttgctcg acccgcaagg gtatccgctg ccgggttctg gcgcgccctt tcagttctgc 240
ttgctgtcsg caccgctgcg ttacccggaa ccgccgggac gaacagcatg acgtccgctt 300
tggagaacta catcaaccgt atcctcaagc tggcgccgcg ggcgtgagcc ggggtcgcgg 360
agaggccgcg gtcggggatc ggtgggaggt tgggaggcct ggcctcggcg ggatcctggg 420
ggcgggcgag gagatgaggg ccccggaacg acccagagtt cgccggcggc gcctcgagcc 480

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ttcccgtgctgc tgcggggccca rgggtccttt ccattttgcc tgcaaaaccc aaataaaaaac 540
ccagtgtgat tattccgaac ttttctgtct taaaaaaaaat gtacgtcttt gattcttact 600
tactatttcc ctatggcata agtggttaaag tttgtganta agatgaacag tcgtncctggc 660
ggcgacaaca gtttgcaatc tttgta 686

<210> 136

<211> 242

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (229)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<400> 136

cagcttactc tcaatatatc tctcttactc tctctctctc tctctttttt ttttaatatg 60
gtgaaattag accaggggtc agaacataga ttttagtctc ctttagttca tctactagga 120
gactaaatta gataatctct aaactccctt ttagttctaa aattctgtaa ttaactcta 180
gcatatcatc attttagact aaaagttttc ttcttctctc tcttttttnt tttgggtttt 240
tn 242

<210> 137

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (445)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<400> 137

caggaagagc ccaactgggt atcagaataa gccacatgca ctttctgaaa ctgcccaaatt 60
ccacacctgc ataagaattt gagcccagtt cataaagcag atcatgaagc aattatcttc 120
ctggaagggt ttttagcttg ctctccagtt gcctcagcag ctttggctct gtgccacagt 180

gagcccaagg ggaaggtgat ggaacagcat cacatctgca ggctcagtgt tttgtttggt 240
gagggttaagg ggagggaatg tagacggatg aagaaatttc tccctactgc ttccattttg 300
atatttcttt aacttcacat ttcattcctca ttcctagcag ttgcctagtt atagaggatt 360
tcttttawct ttttttcaga ggcattgccag gtggaagtga ggtgcttgst ggsctacaac 420
tccagtgtc gcaattccaa aatgnccctt ggatggaggg ttggtgagaa tgtcaccaca 480
gtgggaaacc agcaatcggg ggaaccattc ccttaagcaa gcctttnaaa gttnttttaa 540
tgccc 545

<210> 138

<211> 396

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (373)

<223> n equals a,t,g, or c

<400> 138

tcctcgggga gccagttgt gccaccatt ctctgtaagg tggctccagg gtgggcttag 60
gagcctataa tagtggccag tgccagagga ggctccctca agaaagccag agttgagatc 120
tgaggaggga gagggaagta gccagaccag ggtggagatg aggggtattct gagcagcagg 180
acctgcaggg gcacaaggca agggccgcatt cctagaggag acccagtggc caggcacatc 240
atgggaactg caggctggcc ccaagcctct gccccgctcc tcccttgcat gcaggggctc 300
ctggagcctt gtgctcatcc tgggctcttg aggnccagc cctgcacaga gagcgagac 360
gtgccttgcc ttncacccg tccgctctgt cctctt 396

<210> 139

<211> 2771

<212> DNA

<213> Homo sapiens

<400> 139

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gcttttagtgc tgtctccgct tttctttcac cttcacagag atgtcttatg gtgaaattga 120
aggtaaattc ttgggacctg gagaagaagt aacgagttag ccacgctgta aaaaattgaa 180
gtcaaccaca gagtcgtatg tttttcacia tcatagtaat gctgattttc acagaatcca 240
agagaaaact ggaaatgatt gggctccctgt gaccatcatt gatgtcagag gacatagtta 300
tttgcaggag aacaaaatca aaactacaga tttgcataga cctttgcatg atgagatgcc 360
tggtaataga ccagatgtta ttgaatccat tgattcacag gttttacagg aagcacgtcc 420
tccattagta tccgcagacg atgagatata tagcacaagt aaagcattta taggacccat 480
ttacaaacc cctgagaaaa agaaacgtaa tgaaggagg aatgaggcac atgttctaaa 540
tggtataaat gacagaggag gacaaaaaga gaaacagaaa tttaactctg aaaaatcaga 600
gattgacaat gaattattcc agttttacaa agaaattgaa gagcttgaaa aggaaaaaga 660
tggttttgag aacagttgta aagaatctga accttctcag gaacaatttg ttccatttta 720
tgagggtcat aataatggtc tcttaaaacc tgatgaagaa aagaaagatc ttagtaataa 780

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agctatgcc a tcacattgtg attatcagca gaacttgggg aatgagccag acaaatatcc 840
ctgtaatgga caagtaatac ctacattttg tgacacttca tttacttctt tcaggcctga 900
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ggatttgtac tatagaatat cttctagtag taatttttct gtagagcaaa ttatatttct 2700
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aaaaaaaaa a 2771
```

<210> 140

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (329)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 140

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tgaaataagg gtgataataa aggtcccggg cttgctcact catggtcaca gtaaaatttt 120
tatgcaagta tataccacct tacataaacc tcaactttaga taccctcaag tgattgcaca 180
tcaagatctt gcaaattgaa aaatacatta agtatgccat ggggttgact ttttatcaga 240
attcacacat gatttctttc ataagttcag gatcttttag ggtgcccata gccttgcccta 300
tatttacgta ttttataaac ctacatttng gkatawgaag tcttttcytc tttttttgag 360
acgagtatcg ctctgtcgcc caggctggag tncagtggca ggatcttggc ccactgcaag 420
cn 422
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<210> 141

<211> 1630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<400> 141

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tggggggccg agacagactt cgcccagggtg acgggtagta ggggcggcgc gcttggcctc 120
gtggggtgta agaccactt gctgttgccc ccggacctg ccgccacacc agccctgtcc 180
tggggcgga ccgaagaagg tcgggccctg ctgcccgcgc ccgtccttcc tccttcccgg 240
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gaggcagaag tgtgcctcct acgtgttggc cctgaggcct ggagcttcag tgcctcactc 480
acaccggtgg ccctgggcag tgccttgcc tacagatccc acggtgtcct ggatcccagg 540
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atgggggaat ttaaaaacca ttcttgtatc agaagggtgaa ttaggcgcac ggtcttttgtt 1560
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ttattnaata aatttccact agaggggtgtt ctcaggtcac tttgcagtgg aagtgggact 1620
tagttcctcc 1630

<210> 142

<211> 264

<212> DNA

<213> Homo sapiens

<400> 142

accaggatgt ctctgaaatg gacgtcakt ttctgctgat acagctcagt tgttacttta 60
gctctggaag ctgtggaaag gtgctagtgt ggcccacaga atacagccat tggataaata 120
tgaagacaat cctggaagag cttgttcaga ggggtcatga ggtgactgtg gtwracatcy 180
tcggcttcta ctctgtgtaa tgccagtaaa tcactctgcta ttaaattaga agtttatcct 240
acatctttga actaaaaatt attt 264

<210> 143

<211> 636

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (323)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<400> 143

antccaccng gtggaggccg ctctagaact agtggatccc ccgggctgca ggtgcgggca 60
attcgtctgg cgctggaagg ggttgatgtc aaactggaac aggccgcaag aacactgggg 120
gccgggagct ggcgcgtttt ctttactatc acgttaccgc tgaccttacc gggaattatt 180
gttggtacgg tactggcttt tgctcgttct ctcggtgagt ttggtgcaca tcacctttgt 240
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ccccggcgggg aaaagtggag cgcgcgagact gtgccattat ttctattgcg ctggcgatga 360
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catgctggaa ctgaattttt cccagacggt gggcaacccat tgcctgacta ttaatgaaan 480
taccgtactt caatccataa agttgcgtta agccgcacgg ttcaaaacgg ctgggcacca 540
gaatgacgtc cgcgcgcgcc ataatgcgat gcgaawatgc tcgtgatagc caatctgaac 600
gccacactga ccgggggtatt tccgtgccgc cgcaag 636

<210> 144

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 144

ccgccctcgg cgctcctctgt agcggggcgac ctaggccgcg ggacccggac ggaggtagag 60
gccagggcag cgcgtccggg agcggagtcg gcgcccgcgg ccgccatgcc ggacagctgg 120
gacaaggatg tgtaccctga gcccccgcg cgcacgcggg tgcagcccaa tcccatcgtc 180
tacatgatga aagcgttcga cctcatcggt gaccgacccg tgaccctcgt gagagaattt 240
atagagcggc agcacgcaaa gaacagggtat tactactacc accggcagta ccgccgcgtg 300
ccagacatca ctgagtgcaa ggaggaggac atcatgtgca tcaaaktcga ccaagaaatt 360
atcacattat gcaggatcgg ytcaaagcyt ktcagcagag ggaaggacag actaccagca 420
gactgtatca aggaaktgga gcagttaccc aggtggccaa ggctaccagg gaccgntatc 480
aggacctgng ggcctacatg 500

<210> 145

<211> 1945

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1934)

<223> n equals a,t,g, or c

<400> 145

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cagacatatc tcagcattta taacctaaaga ctgaatcact gcattttacc cttaatgagg 180
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gactcacgtc tccaacaacc aagctcccca agtttcgggt tctgtcacct ccaggctgag 360
ccgggctggc ggaagaggca cgtgcgctgc tgaatggagc tggtcgctgg ttgctacgag 420

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gtaaatagtc gttttgtggt cactgggagc aaagatgaaa caattcacat ttatgacatg 600
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gcaaagaaat gggaatgcct gaartcaatt aaagctcaca aaggacaggt gaccttcctt 780
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gtagaatggt ccccaagagg agagcagtat gtagttatca tacagaataa aatagacatc 960
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acaatgcagt gaatcacaga tgtctcctga aagaactctt ttagatgaaa tcattctact 1620
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aaaaatatat atattaaaaa accactttta gatgggtttt tttaaaaaaa aaaaaaaact 1740
ggtaaaatta cttttggcag acagtgtttt atgaattatg tatcatgttg atatataata 1800
tgtaaatgtg tcatgtaatt tttactttgt acaaagcaaa taaagatctt tctcaaaaata 1860
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ttactgcggt ccgnaagggt aattc 1945
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<210> 146

<211> 1114

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1034)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1055)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1084)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1108)

<223> n equals a,t,g, or c

<400> 146

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tgtggcgggc gccgcagctc cgcgtccccc gcgcctcctc ccagcgcaga cttcaagggc 120
taccactgga cccttcccct gtcttgaacc ctgagccggc accatgcacg gacgcctgaa 180
ggtgaagacg tcagaagagc aggcggaggc caaaaggcta gagcgagagc agaagctgaa 240
gctataccag tcagccaccc aggcgtattt ccagaagcgc caggctggtg agctggatga 300
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gaactgccga cgagaggtgc tccagcagct ggagactcag aagtctcctg aagagttggc 420
tgctctggtg aaggcagaac tgggcttcct ggagagctgc ctgcgggtga accccaagtc 480
ttatggtacc tggcaccacc gatgctggct gctaggcs gc ctgcctgagc ccaactggac 540
ccgagagctg gagctctgtg cccgtttcct ggaggtggat gagecggaact ttcactgctg 600
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cactgacagc ctcatacccc gaaacttctc caactactct tcctggcatt accgctcctg 720
tctcttgccc cagctgcacc cccagccgga ttctggacca caggggcgcc tccctgagga 780
tgtgtgtgctc aaagagctgg agctggtgca gaatgcttct tctactgacct caatgaccag 840
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atggaggacc ccanatggca ggaacccggg ccaanctgtc tggatttcca agatgggtggg 1080
gcanaaattg ggctggggca aggttgntg gaaa 1114
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<210> 147

<211> 546

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (486)

<223> n equals a,t,g, or c

<400> 147

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ctcgggctga gtagtggcgt ggccgtgagg tccctgcgcc tgcgccctgg atggtcctgg 60
tgccgctccc gccttcgcag ccagcgcggg cttacctagt gttaagtctc tcttcttggg 120
tggccacgc ctaagcgacc tatgcttctt gttcttctga aatcttacag ttcccccttag 180
atgtaggttg gctatttgta gcttccgatt cagataagtt tggaaacttga cagatgtttt 240
cggggggctg ctttagagag aggcttttga ctatgcaagg ggaggaagga gggttcagaaa 300
aacggggtcg gggggtcggc aggacgactc ttraartgtg gaaggtggaa gctgggaggg 360
gagataaagg gcaccraaga ccagcttggt tgctcctatc aagggtgatcc tttccagagc 420
aagagccata tgnatgtcta gtcgcacgag tttgtgccaa gtccttttga aaaaccttca 480
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gatgtnggat ctcatgtaat cttgaagaca tcttagtcgt cctaagggtt aattatttaa 540
ttgatg 546

<210> 148

<211> 1763

<212> DNA

<213> Homo sapiens

<400> 148

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ccgcgcactt cccgccctcc cacccttcctt tcgcccttcc accakacctc cctcgacgcc 120
cgacagctgc tctgggtact gtttccgggt cagggtgacc tctgggggtga ggaaactgcg 180
actgggagcg ggacccaggc gtgcagcatt cgccatgctc cgctcacgcg tgggagactg 240
ggctgtgggg taccggccccg gaaagcacgc agcctccaaa gccgccttcc tcagggaat 300
ttgcgtgacc ttactgccct ccgtctacag gccttgatcc tctccaggcc gatttttcca 360
caatttaaat ccaggttcac ctggtatcca gctccagcaa cttagagcgt ttcacgtcac 420
gccggcgccc aggcgtcggc ttgtataacc tgaaaacgct cctgtttttc tcatctgtgc 480
agtgggtttt gattcccacc atggccatca cccagtttcg gttattttaa tttgtacct 540
gcctagcaac agtattctca ttcctaaaga gattaatatg cagatctggc agaggacgga 600
aattaagtgg agaccaaata actttgccaa ctacagttga ttattcatca gttcctaagc 660
agacagatgt tgaagagtgg acttcctggg atgaagatgc acccaccagt gtaaagatcg 720
aaggagggaa tgggaatgtg gcaacacaac aaaattcttt ggaacaactg gaacctgact 780
attttaagga catgacacca actattagga aaactcagaa aattgttatt aagaagagag 840
aaccattgaa ttttggcatc ccagatggga gcacaggttt ctctagtaga ttagcagcta 900
cacaagatct gcctttttatt catcagtcct ctgaattagg tgacttagat acctggcagg 960
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ggttacctga cctaaattag ataaattgta gggcttttagc tttcttattt ttgtcaaaag 1620
ttggtgttga catacattcc ctctaatttg aactgggtatt gtttacgtt gataacaacat 1680
taagggaattt gatgattttt atttcatgaa aatgacatta aatgcaataa ttttacttat 1740
cataaaaaaa aaaaaaaaaa aaa 1763

<210> 149

<211> 371

<212> DNA

<213> Homo sapiens

<400> 149

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ctgacagctg tgtccgtatc aagcatcagt ctctcaaaca gttgccccag cctgacagtg 120
ctagtctctg tttaatggta aaaggagact ttgccataat tttcagatga agatgtttcc 180
caaacactgt ttacagaatg agatgtgact ctacagatac ctcatagaag acaatccaag 240
atcatacttc attaaactga cagagtacgt gtcttaaagg aagcatcagg aattccaata 300

tttgcmttta aaatactttt twagggcctt ttatattagg ccatgcttg aaactggat 360
 tttttttatt a 371

<210> 150

<211> 432

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (379)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<400> 150

atnttcagga atcctcacgc aacccggaag aagcgcaagg gctggaccgc taaacctgag 60
 ggcgcccggc ctgcgcacgg gaacctggac tggaacccta cttgcaggtc cccaacttgc 120
 gtctctyctc tctgtctcta cccagccaa ggacaaagac ttctcctccg gaaggcctcc 180
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 gggcgccctc ggytctctct tctctacgg ctacaacctg tcggtggtga atgcccccam 360
 cccggaagga caattttgnt gggccaataa atggggtttt gaaatttntt gttggatttg 420
 ntgaatgggc tt 432

<210> 151

<211> 401

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (234)

<223> n equals a,t,g, or c

<400> 151

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 cttggacctt gatggaaatg agagcscatt ggccctattg atgtctaacg gcagwacgaa 120

aaggggtgaag agtttatcca aatctcggcg aaccaagata gcaaagaagg tagacaaggc 180
taggctgatg gcagaacagg tgatggaaga cgartttgac ttggrrtcag atgntgagct 240
gcagattgac gagagattgg ggaaagagaa ggcgaccctg ataataagac caaaatttcc 300
ccggaaattg ccccggtgca accttgctct gacccaacc gagttcgtga accaggagaa 360
gttgagtttg acattgagga ggatatacaa cagatgaggg t 401

<210> 152

<211> 851

<212> DNA

<213> Homo sapiens

<400> 152

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catacctata tcagacttaa tccttaaaag aagattaatt catggaggac agatgttaaa 120
tggattggca ggtccaactg taatgaatgc agcaccattt ctctctacga cgtgggtttc 180
tgcagatgaa agggccacag ccacagctat tgcataatg ctcaagtatc ttgggggagc 240
atgtgcattt ttagttggac cacttggtgt tccagctccc aatgggacat cactcttct 300
tgctgcagag agcagcagg cgcatattaa agatcgcata gaggtgtgt tatatgcaga 360
atgtggagtt gtctgcttaa tattttctgc aactagct tatttccac cccgacctcc 420
tcttctccc agtgttctg cagctagcca gcgtgagtta tcggagaagc gttttagat 480
tattaagcaa ttttcgattt ttgatgattg ctttagcata tgccatacca cttggtgtat 540
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gagctacact gtcattccac tgggtcaccc tgamctgttt gaacagcat acacacctac 780
ctttaaccac agtgacattg tatgcctcct gtattctcct gggagtgttc ttgaatagca 840
gcgtgcctat a 851

<210> 153

<211> 1678

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1663)

<223> n equals a,t,g, or c

<400> 153

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ggccttggtc agcatctagg tgccaacagg gcaagggcgg ggtcctggag aatgaaggct 120
ttatagggct cctcaggag gccccccagc cccaaactca ccacctggcc gtggacacct 180
gtgtcagcat gtgggacctg gttctctcca tcgccttgct tgtgggggtg actggtgccg 240
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ggcaggtggc tgtgtacagt catggatggg cactctgtgg ggggtgtcctg gtgcaccccc 360
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accgctcta caatatgagc cttctgaagc atcaaagcct tagaccagat gaagactcca 540
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cctgtccaat gacatgtgtg ctagagctta ctctgagaag gtgacagagt tcatgttgtg 780
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ctgtaatggt gtgcttcaag gtatcacatc atggggccct gagccatgtg ccctgcctga 900
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gaggtttgtt caggtccccc aaaccaccgt cagatttgat gatttcctag caggacttac 1620
agaaataaag agctatcatg ctgtggttaa aaaaaaaaaa aanaaaaaga agtcgacc 1678

<210> 154

<211> 1158

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1138)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1148)

<223> n equals a,t,g, or c

<400> 154

ctttatggtg aaagccttac ggagatgtct gtgagtagca tatcttctgc aggtctttct 60
gtggcctctg ctgtcccctc agcacgaccc cgccaccaga agtccatgtc cacttctggt 120
catcctatta aagtcacact gccaaccatt aaagacggct ctgaagctta ccggcctggt 180
acaaccacaga gagtgcctgc tgcttcccca tctgctcaca gtattagtag tgcgactcca 240
gaccggaccc gttttccccc agggagctca agccgaagca ctttccatgg tgaacagctc 300
cgggagcgac gcagcgttgc ttataatggg ccacctgctt caccatccca tgaaacgggt 360
gcatttgcaa tgccagaagg ggaacgtcaa ctggtataat aagcaaaatc acatccaaat 420
ttgttcgcag ggatccaagt gaaggcganc agntggcaga accgacacct caagaagtac 480

```

atcaggggaa ccaaaagaaa gagacaagga agaggggtaaa gattctaagc cgcgttcttt 540
gcggttcaca tggagtatga agaccactag ttcaatggac cctaatagaca tgatgagaga 600
aatccgaaaa gtgttagatg caaataactg tgattatgag caaaaagaga gatttttgct 660
tttctgtgtc catggagacg ctagacagga tagcctcgtg cagtgggaga tggaagtctg 720
caagttgccca cgactgtcac ttaatggggg tgcgttcaag cgaatatctg ggacatctat 780
tgcctttaag aacattgcat caaaaatagc aaatgagctt aagctgtaaa gaagtccaaa 840
tttacagggt caggggaagat acatacatat atgaggtaca gtttttgaat gtactggtaa 900
tgcctaattg ggtctgcctg tgaatctccc catgtagaat ttgcccttaa tgcaataagg 960
ttatacatag ttatgaactg taaaattaaa gtcagtatga actataataa atatctgtag 1020
cttaaaaagt aggttcacat gtacaggtaa gtatattgtg tatttctgtt cattttctgt 1080
tcatagagtt gtataataaa acatgattgc ttaaaaaaaa aaaaaaaaaa aaaaattnct 1140
gcggccgnca agggaatt                                     1158

```

<210> 155

<211> 1969

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 155

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gccgcacgag cagccagaga cagcgcgacc cggagccgga gccagagcca gagccagagg 60
gaggacgcag ccgcgccggg gcgcagaacg accagctgag caccggggccc cgcgccgcgc 120
cggaggaggc cgagacgctg gcagagaccg agccaggtaa gcggcgaggc cggggaaggg 180
gggcagccca aggcggaccc ccagagctcg ggggtgcaggg acgcggggct ccgcggcgac 240
aggcagaggg accttcccgc ctccgcagcc acgcgcgcgc ccccggaatg aacctgagc 300
cccagcgtca ggcgcgcgca ggattctgac accgcaggat tcgcccgggt ccgtgccttc 360
cgttccctgg ggctcagaag ccggcgcgac tgcagcgcca ccgccttcca ccgtcccagg 420
agcggatccc gcccgcgcgc acccgcgacg ggcgccagcc ccccggtagt tatgagaant 480
aataataact tattaacagt gacaaagcag gggttgacca gcaaagcctc cgtgtgcttc 540
ccaatcccgt gggcagtaaa gcggtatatt cggggttccc tcgggtgtcc aggagagaga 600
gtccacttat tttctttcct gtcacttctg atgaggcgac cgaacgcctc gtttagcgaa 660
gagggaatta aagcccagaa tgagcctgcc tctgcgtctc cagtggcaca agccctctct 720
tgcccacctg gatcctaaca ccgatgtct tttggtctgg ccttcccggg tatcttggtc 780
cacggcattt tccctgcctc cctctcccgc ctctcctcag cacacagatc cagaatcccc 840
atataattct actagacagt agggagaaaag ttcaaccacg aaacgtctct aactttgggt 900
tcttgatgat tcttagcaaa tgaatgcgta ataaacatat ttactcactc ttactccgg 960
agagctcctt agtcatgtga aaaaagtga atgtatccac gatgacagtg ggctgtttgt 1020
tactcacta aagagataag ggtggattga attctgttct ctccctgct aacatgtaac 1080
ttttgtcttc ccatccctcc tccccactc tcctttccag aaaggcactt ggggtcttat 1140
ctgttggaact ctgaaaacac ttcaggcgcc cttccaaggc tccccaaaac ccctaagcag 1200
ccgcagaagc gctcccagac tgccttctcc cactcagc tgatcgagtt ggagaggaag 1260
ttcagccatc agaagtacct gtcggcccct gaacggggcc acctggccaa gaacctcaag 1320
ctcacggaga cccaagtga gatatggttc cagaacagac gctataagac taagcgaaag 1380
cagctctcct cggagctggg agacttgag aagcactcct ctttgccggc cctgaaagag 1440
aggccttctc ccgggcctcc ctggtctccg tgtataacag ctatccttac taccataacc 1500
tgtactgcgt gggcagtgga gccagcctt tkggtaatgc cagctcaggt gacaaccatt 1560
atgatcaaaa actgccttcc ccagggtgtc tctatgaaaa gcacaagggg ccaaggtcag 1620

```

ggagcaagag tgtgcacacc aamgctattg gagatttgcg tggaaakctc agattcttca 1680
ctggtgagac aatgaaacaa cagagacagt gaaagtttta atacctaagt cattcctcca 1740
gtgcatactg taggtcattt tttttggttc tggctacctg tttgaagggg agagagggaa 1800
aatcaagtgg tattttccag cactttgtat gattttggat gagttgtaca cccaaggatt 1860
ctgttatgca actccatcct cctgtgtcac tgaatatcaa ctctgaaaga gcaaacctaa 1920
caggagaaag gacaaccagg atgaggatgt caccaactga attaaactc 1969

<210> 156

<211> 400

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (366)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (398)

<223> n equals a,t,g, or c

<400> 156

aattcggcac gagaagaaag aaagaatgaa agaaagaaaa gaaaagaaag aaaggaaaga 60
aaaaggaaag aaagaaagga aagaaaggaa agaaagaaag agagagaaag aaagaaggaa 120
aaggaggaag ggaattccag gtatatacca ctgcatgagt aaaggcaggg ttgtggatag 180
acatagttga tttgtagggc ccttgtttgc caagaatagt cctgctttac ccctgttgct 240
ctgatgtaat tattaataat actgcctcat tcagtcctaa ataagtcttg grtttggact 300
agaaattata tggctaccyc tttatgtggg actaaaagta attccttgrg acmgggacnt 360
ggagtnaggt gcccaaggaa agctagaagg tagttttntc 400

<210> 157

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 157

catggtttgg taacctcatg cactgtggga atgtcagagg accccgagat aatgcttcac 60
tgccaagtct gaaaattgtg tccacaagat ttgattggtg gtattttcta tcattgtaca 120
acttaaaata tcttctaatt tccatttttt ttttttgaca tgagttgtat agaaatgtgt 180
gcttcagttt ctgttatagc aacaactctt gtcaccata gccttacaaa aattcctaata 240

```

tttaatatatt aaatttttaga attckacrag cagaattaca aaaagagtaa ctaacaagaa 300
agttagattg tgatgggata acggaatgtc aagtctaatt gtcaggaaaa gacaaaataa 360
catgggaatg acaatcaaaa tggactaagg acttagaaga tccgaaacta tgaagctact 420
aaaagaaaca ttggggaatg ctccaggaca ttggtctggg caaagatttc ttgagcaata 480
ccttaaaagg acaggcaacc caagcaaaaa tggrcagwtg ggwtcmcwtc magctaaaaa 540
acttctacac agcgaaggaa acaaagtga cagaataaca tgggaatgtt ttctgtaatt 600
tagtagtaac tggcaatagt ttacaaacac attttgtgta tactgctgtc attgcactga 660
ttaccttctg ttgtagtgac tttgttctat tagtccactc aattaaaata tttgggttttn 720
tt

```

722

<210> 158

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<400> 158

```

taatattcct ttggattcag agaccacaaa ctaccagatt gtcaatcatg accaaaagtt 60
gcttctcatc acttctacaa cccacacaatg gaaaaagaac cgagtgcagag tgtatgagta 120
tgatactagg gaagatcagt ggattaatat aggtaccatg ttaggccttt tgcagtttga 180
ctctggcttt atttgccttt gtgctcgtgt ttatccttcc tgccttgaac ctggtcagag 240
ttttattact gaggaagatg atgcacggag tagntctagt actgaatggg acttagatgg 300
attcagtgag ctggactctg agtcagggaag ttcaagttct ttttcagatg atgaagtctg 360
ggtgcaagta gcacctcagc gaaatgcaca ggatcagcag ggttctttgt aaatagtatt 420
ttgagacact aagatgtttc tactgctacg gratgtattt taaacacata tcgtttcttt 480
ttcttggaag aaaagttgat taggaccaca gatttggttt agaaagggta atattttgaa 540
atactacaag gtttagacag tccatgaatc gacctgttta ataatttacc atcctgaaag 600
tccagaatta aaatatggaa gcaagaacta tataattgat taggatgctt ggtaggtttt 660
tttcattgtt caaatattca ttgcacagtg gattgttttg attagttagt atgctttttt 720
tttaattaat tcagtcttct gttaattttt aagttttggt tagtgccaca aggaatttaa 780
ctttttgatt tgtataatag aaaactgaac taggaattgt tagcgggggt ttgaaggatg 840
tgtactttcc ttcaaaaataa agtggttagt tttcaaaatt ttacactagt cagttcttta 900
tattctaagt taaatgtagt ttgtaaaatt attttggttt tcttctacaa aggaaaaaat 960
tggatttata tatataaggt tactgcataa tgatttcatt ttgataatgt gcagaatggc 1020
ctcataagct cacagaaagt aaaaaaaaaa aaaaaaaaaa aagaaaaaat caggattcca 1080
ctgtttttaa agaaatctca gtttttattt tggaatataa aatgtgtatt tggtatatgt 1140
gaccaatttt ctatcccaaa aaacacccat tcttagtaat gtcatgaatt aaacaccctt 1200

```

<210> 159

<211> 345

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (321)

<223> n equals a,t,g, or c

<400> 159

```
ttcggcacga gagaaaagta aaaaaaagaa agaaagaaag aaacaaacaa acaaaacaac 60
tggcatacat atatctccta aatacaggaa gaagtattca taatctcact ctttagcatg 120
gtacaaagct aaccacaact aawttattgt atataargcc acgtgaagtg stgtgtgaca 180
gccttatttt gtgaatagggt ctgagaaaac cagttcaaat tctcctgaga ctatttcaga 240
ggrgttaaaa tttgaactcg tttaaaaaatc atgrttttatt tacttaatat taagtttagg 300
ttaacgggca gaaaangagg ngcctggggg catcacccaa atttt 345
```

<210> 160

<211> 476

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (312)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<400> 160

```
aattcggcac gagagacacc agagtgaagg agagaggcca tgctgtgtcc gagaagctcc 60
tactggggtg gaagggacag ctccacaaag gctgctcttg caggggctct cctgcagcaa 120
ggtgcctgct gactgtcccc agactgtctc ccgacacaga gggatgcaaa ggcagcctct 180
tcctgctcag tggaatagggt aaattatata acctttcact tcccactctc acttctgccc 240
ctgctaccct tagtcttttg cttttgctga cattttcccc tcttatcttt tctcctgacc 300
aagttctagg tntttcatag ggcagtctta ggtgagggtt ggaaccccaa tgaagttggg 360
caacagaaac ccagctnaca atggctgttc actgtgggca agctgtttcc ccttcattct 420
ntaaaagtgg aggtgggggtt agtgtatgag tctgggtttc cattcaactg tgtgtg 476
```

<210> 161

<211> 520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (520)

<223> n equals a,t,g, or c

<400> 161

```
aattcggcac gagctgcgcg cggctacagc acggttcggt tttccttttag tcaggaagga 60
cggttggtggt gaggttagca tacgtatcaa ggacagtaac taccatggct cccgaagttt 120
tgccaaaacc tcggatgcgt ggccttctgg ccaggcgtct gcgaaatcat atggctgtag 180
cattcgtgct atccctgggg gttgcagctt tgtataagtt tcgtgtggct gatcaaagaa 240
agaaggcata cgcagatttc tacagaaact acgatgtcat gaaagatttt gaggagatga 300
ggaaggctgg tatctttcag agtgtaaagt aatcctggaa tataaagaat ttcttcaggt 360
tgaattacct agaagtttgt cactgacttg tgttcctgaa ctatgacaca tgaatatgtg 420
ggctaagaaa tagttcctct tgataaataa acaattaaca aataaaaaaa aaaaaaaagg 480
ggggggcccc tctaaaaggt ccaagcttac gnacgggtgn 520
```

<210> 162

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<400> 162

```
aattcggcac gagcgcgcct ccacgcccag ctaatttttg tatttttggt agagacgggg 60
tttcttcacg ttggctaggc tgatcttgaa ctctgacct caagtggtn gctgcctca 120
tcctcccaaa gtgctgggat tacaggcgtg acacctgcac ccacccatgc tctagtacat 180
cctaaagaat gccttttagtt cctctttcct gacattactc tgcttaaatt cccagattc 240
aagctttttg agaatcctat ctacgacattt tgggcatcag gccatgttat atataggtrc 300
acaacttcta ggccttgttt agttggacag gttnaaaag 339
```

<210> 163

<211> 357

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (343)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<400> 163

```
aattcggcag agcagaacat tggatgctg cactgactg tagatcttct cattaataat 60
aggcaacctg gtcagggtgca cgartctagg gttcagaatc caacaggctc aaattcaagt 120
ccagctcagc cactggtgctg atgctgtctg aacctcagcg tcctcagctg ttaaacagag 180
gtaaccatcc ccatctcagc agctttggga ggaaattaaa tgagatatat tggggatcca 240
gataaccaat aaaatatcaa atcactttac cagttcaagc tcttaccact tcagtgttg 300
catgggcttt atcactgacg gatggaactc aggggttcca ggngttcng acccagc 357
```

<210> 164

<211> 1079

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (303)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (993)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1058)

<223> n equals a,t,g, or c

<400> 164

```
ggcacgagct tggcctccag agtgctggga ttacagggtg gagctaccgc gcccggecta 60
ttatcttgta ctttctaact gagccctcta ttttctttat ttttaataata tttctcccca 120
cttgagaatc acttgtagt tcttgtagg aattcagttg ggcaatgata acttttatgg 180
gcaaaaacat tctattatag tgaacaaatg aarataacag cgtattttca atattttctt 240
attccttaaa ttccactctt ttaacactat gcttaaccac ttaatgtgat gaaatattcc 300
tanaagttaa atgactatta aagcatatat tgttgcatgt atatattaag tagccgatac 360
tctaaatara rataccactg ttacagataa atggggcctt taaaaaatatg aaaaacaaac 420
ttgtgaaaat gtataaaaaga tgcactgtgt gtttcaaatg gcactrtctt yttttcagta 480
ctacaaaaac agaataattt tgaagtttta gaataaatgt aatatattta ctataattct 540
aaatgtttta atgcttttct aaaaatgcaa aactatgatg tytagttgct ttattttacc 600
tctatgtgat tatttttctt aattgttatt ttttataatc attatttttc tgaaccattc 660
```

```
ttctggcctc agaagtagga ctgaattcta ctattgctag gtgtgagaaa gtggtggtga 720
gaaccttaga gcagtggaga ttgctacct ggtctgtgtt ttgagaagtg ccccttagaa 780
agttaaaaga atgtagaaaa gatactcagt cttaatccta tgcaaaaaaa naaaatcaag 840
taattgtttt cctatgrgga aaataacat gagctgtatc atgctactta gcttttatgt 900
aaatatttct tatgkctcct ctattaagrg tatttactaa aactctgtaa tctccaaaat 960
attgctatca aattacacac catgttttct atnattctca tagatctgcc ttataaacat 1020
ttaaataaaa agtactattt aatgatttaa aaaaaaanaa aaaaaagaaa aaaaaaaaa 1079
```

<210> 165

<211> 1325

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1302)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<400> 165

```
ttaaaacaag atacatacat agtataacac acctcacagt gttaagattt atattgtgaa 60
atgagacacc ctaccttcaa ttgttcatca gtgggtaaaa caaattctga tgtacattca 120
ggacaaatga ttagccctaa atgaaactgt aataatttca gtggaaactc aatctgtttt 180
tacctttaa cagtgaattt tacatgaatg aatgggttct tcactttttt tttagtatga 240
gaaaattata cagtgtttaa ttttcagaga ttctttccat atgttactaa aaaatgtttt 300
gttcagccta acatactgag ttttttttaa ctttctaaat tattgaattt ccatcatgca 360
ttcatccaaa attaaggcag actgtttgga ttcttccagt ggccagatga gctaaattaa 420
atcacaaaag cagatgcttt tgtatgatct ccaaattgcc aactttaagg aaatattctc 480
ttgaaattgt ctttaaagat cttttgcagc tttgcagata cccagactga gctggaactg 540
gaatttgtct tcctattgac tctacttctt taaaagcggc tgcccattac attcctcagc 600
tgtccttgca gttaggtgta catgtgactg agtgttggcc agtgagatga agtctcctca 660
aaggaaggca gcatgtgtcc tttttcatcc cttcatcttg ctgctgggat tgtggatata 720
acaggagccc tggcagctgt ctccagagga tcaaagccac acccaaagag taaggcagat 780
tagagaccag aaagaccttg actacttccc tacttccact gctttttcct gcattkaagc 840
cattgtaaat ctgggtgtgt tacatgaagt gaaaattaat tctttctgcc cttcagttct 900
ttatcctgat accatttaac actgtctgaa ttaactagac tgcaataatt ctttcttttg 960
aaagctttta aaggataatg tgcaattcac attaaaattg attttccatt gtcaattagt 1020
tatactcatt ttcctgcctt gatctttcat tagatatatt gtatctgctt ggaatatatt 1080
atcttctttt taactgtgta attggttaatt actaaaactc tgtaatctcc aaaatattgc 1140
tatcaaatta cacaccatgt tttctatcat tctcatagat ctgccttata aacattttaa 1200
taaaaagtac tatttaatga ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaaaag gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggggggg ggnccaaaaa 1320
aaaaa
```

1325

<210> 166

<211> 394

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<400> 166

```
aattcggcac gagtttgcac ccaaattgtt tgacctttgt gcagtggctc ccattatcaa 60
ctggggaacc agtacaatct ttacctagtt actactgagg ttgttctctc tccatcacia 120
aatttcatgc tatttatctg tgagaaaatg cctgaggact ttcacacagt aattcatctt 180
atctggaacc cttaggatca gatgtagacc gagcaaagtgt caagttcaca gagaacacct 240
gtgtcttcag aacattaaag ggcaccatta gagcttggtt cccttcactt tacatgcaca 300
tttttggsat aagttngggg ctkratgatg ttgtcatags naatactgct agratgrttg 360
ctgtactcat tcactncaa aaaagggggg gntg 394
```

<210> 167

<211> 517

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (400)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (401)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<400> 167

```
ataattgCGG ctctttctcc tattcagatt ttacccagtg atggaaaaga tcaattttct 60
tgtggaaatt cagtggctga ccaagccttc cttgattctc tctcagccag cacagctcag 120
gncagttcgt cggtgccag caacaatcac caggtagctc tcaattcctc cttctggatg 180
tggctggcct tacggaaaac agagcgtatt tgtgnaaggc ttgtgatgca ttatagctat 240
tgccattccc caaaagcaaa aacaaagtcg ctttaggttg ttctgtggca tttctggttg 300
gtactaacia agaaatcacc tgttwagcct gataatgact gtttgcaaat ttattataag 360
agaaaaggca gggatttgag ggttgctttt aggaagtctn nccatgatat ggaacacaga 420
ccccagaaac ttgcaaatac cctcttaggt taaggcatgg aaagaggagg angagagagg 480
tcttggttgt tgaggaggtc catgtcaggc cttggcc 517
```

<210> 168

<211> 341

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (335)

<223> n equals a,t,g, or c

<400> 168

```
cttccctcag cccttgcca acagcattct actttctgtc tctacggatt tracacttta 60
gtagcctcat gtaggaagaa tcataatact tgtytttttg tgactggcct atttcactta 120
gcataatatt ttcaatgttc atccattttg aagctccatg tgagtgggca ggaacttggt 180
aactggaggc cttcactgag aagtgattaa ggtgatgaat acctgccagt gcagtggcct 240
cacacctgta ctccagcact ttggggaggc caaggcagga agatcatttg agccccagga 300
tttsgggacc accttkggca atatagtgag acccngtggt t 341
```

<210> 169

<211> 350

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (293)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (305)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (311)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (314)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (338)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (343)
 <223> n equals a,t,g, or c

<400> 169
 ttccggcacga ggtcttgact cctaccccc tacaacacat ataaaaatcag ttccagatag 60
 atcacacatc taaatgtgaa atgcaaaata ataaagcttt aagaaaaaaa gtaatggaac 120
 catcttcatg atcttagagt aagtagagat ttattaagta ggatattaaa ggaacactat 180
 aaatttaggg aaaaaatcaa tatattgatt atattaaaat taaggaactt ttcctcatta 240
 agaggccaca aagtatttgt agtatacaca tccaacaaaa gttccatatt ccngaattwtw 300
 tgganggaat nccnatggta cgttaaaaaa aggccagncc cangggggggg 350

<210> 170
 <211> 441
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (111)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (143)
 <223> n equals a,t,g, or c

<400> 170
 aattcggcac gagacatggt gaacctgggtc tctacataaa atacaaaaaac ttagatgggc 60
 atggtggtgt gtgcctatag tcccactact tgtgggggcta aggcaggagg ntcacttgag 120
 ccccgagggt cgaggctaca gtnagccaag agtgcactac tgtactccag ccagggcaag 180
 agagcgagac cctgtctcaa taaataaata aataaataaa taaataaata aataaataaa 240

taaaaaaaaaa caaagttgat taagaaagga agtataggcc aggcacagtg gctcacacct 300
gtaatccttg cattttggaa ggctgaggca ggaggatcac tttaggcctg gtgtgttcaa 360
gaccagcctg gtcaacatag tgagacaytg tytytaccaa aaaaaggaag gaagggacac 420
atatcaaact gaaacaaaat t 441

<210> 171

<211> 403

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (401)

<223> n equals a,t,g, or c

<400> 171

ttttcatgaa cctcttccct gggaaacctt atgactcaac agtcaaaggt gtccgaatag 60
taaagatggt tttcagtgat caggtctgtg cccatgcctg gccttgata gactctgaaa 120
tgagattcct tgtttgattg atggggatg ggtttctgtt gtgtacattt gaaggaaacc 180
agtttcccca cccaaaattt ctaaggagtt taatctttgg ggtrtagggg agttaacta 240
cactgagtca aggaagtaat tgattgcata tttcctctaa aagtcagcta tggrrttgata 300
ttgactaaaa caaactagca gttctcttcc accaccaagt cmgagcgtct gttcaccatt 360
ctgcatgggt aaaagracc acttagggat gggtaatgnt ncc 403

<210> 172

<211> 984

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<400> 172

caagatatatt acttccgctc caaacaaaga tgggccagct aacgagcncg ggggaaacat 60
ccgcccggaa ggccacttga aggcacttcc gccctctctt aacatggagc cggcggaagg 120
ggtggtgtag ggccggggcga taatggcggc gtcgaggctg gagctaaacc tggcgcggt 180
gctatmccgc tgcgaggcga tggcagcgga gaaacgggac ccggacgagt ggcgcctgga 240
gaagtacgtg ggagccctag aggacatgtt gcaggccctg aaggctccac cgagcaaacc 300
ggcctctgag gtgatcaatg aatattcctg gaagggtggat tttctgaagg ggatgctgca 360
agccgagaag ctgacctcct cctcagagaa agcactggcc aaccagttcc tggccccctg 420
ccgtgtgccca accacagcca gagagcgagt gcccgccaca aagacggtgc atctgcagtc 480
acgggcgcgg tacaccagcg agatgcggag tgagctacta ggcacggact ctgcagagcc 540
tgaratggac gtaaggaaga gaactggagt ggcagggtcc cagccagtga gtgagaagca 600
gtcggcagct gagctagacc tcgtcctgca gcgacatcag aacctccagg aaaagctggc 660

ggaagagatg ctaggactgg cccggagcct caagaccaat accctggccg cccagagtgt 720
catcaagaag gacaaccaga ccctgtcaca ctcaactgaaa atggcggacc agaacctgga 780
gaaactgaag acggagtcag agcgtctgga gcagcacacg cagaagtcag tcaactggct 840
gctctgggcc atgctcatta tcgtctgctt catcttcatt agcatgatcc tcttcattcg 900
aatcatgcct aaactcaaata aaagaccccc gcccaaaaaa aaaaaaaaaa aaaaaaaaaa 960
aaaaaaaaa aaaaaaaaaa aaaa 984

<210> 173

<211> 1194

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (110)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1192)

<223> n equals a,t,g, or c

<400> 173

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ggcgggccgct  ctagaactag  tggatcccc  gggctgcagg  caaaagggan  aattcaaaat  120
ttagaaaaaa  cattagaaat  gttaatatg  gatatttttg  acttaagaca  ttcagaaaag  180
ttaatgtttt  aacacgatat  gtgattatag  aattctattc  atatatgtgt  tcacatttat  240
acactttgct  atactttgta  tttataaata  taattctggt  agataaataa  gtgattcata  300
ttttgtcaaa  actattttta  aatttcaata  tttaaaatat  ttttgaatca  ctgggtttcg  360
ttaagtggca  tcatagrtga  gatttgattc  catgtagcat  ataattttag  attgttcctc  420
tctcacccct  tttaaactcc  ttcaagcatt  gctattactg  gggttgcctt  tgggaaaact  480
tacttctaga  tactaccata  tatctgaaat  agtagagggt  gatgttaata  aaattcataa  540
aataatcatg  tattactttt  tttgatttac  cactggaagg  aaatacagtc  atgtgcaata  600
taatgacgtt  ttggtcattg  agaccacat  gtgtgacagt  ggtcccataa  ggatgttgct  660
gaaaaattcc  tgttgctgcc  tagtgacact  gtagccatcg  taacgccata  gcacgacacg  720
ttactcacct  gttcatgggt  atgctgggtg  aaacaaacct  gtgctgccag  tcatacaaaa  780
gtatagcaca  atgacaatta  tgtacagttt  atcataattc  ttgataataa  atgactatgt  840
tacaggttta  tgtattgatt  ccactttttg  tcattatttt  ggaatgtact  cctactaatt  900
ataaaaaaga  aaaggttaac  tgtaaaaaag  cctcaggcag  gtccttttag  aggcatcca  960
gaagaagaca  ttgttaccat  aggagatgac  agctctatgt  gtgttattgc  ccctgaagac  1020
cttctagtgg  gacaggatat  ggaggggaaa  gacagtgaca  ttggtgatcc  tgaccctgtg  1080
taggcctagg  ctaatgtgtg  tgtgtcctcg  tttttaacaa  gaaagttaa  aaagtaaaaa  1140
aaaaraaaaa  ggnctcgaga  aagggcacaa  gggcncttgg  gcaaaggca  gnac  1194
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<210> 174

<211> 701

<212> DNA

<213> Homo sapiens

<400> 174

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ttctggacaa  ctggcatcag  agactggctg  acatggagaa  cccactctgt  gtgtgctgag  120
grcagggcac  tcaccagtgc  agaggcagaa  gtgggtgcct  gtcctcgagg  gttaaccgc  180
tttgctccc  gccacagcc  cctccacctt  ctaaaagctc  aagagatgat  cagactgaaa  240
caccgcacca  tcttgctgtt  ctgcctaggc  tggaagacct  ggcccagggtc  atggaggccc  300
ctgtccact  tgccagattc  gcaggagtct  tctgaccaga  gctgtcgcac  cttgctgctg  360
ccactggcac  tgctgccatt  ctcatcctct  tgggggcctt  cattgggtgcc  acattctttg  420
tagccacctg  ggctgtcagc  catgagggaa  ggaccctcgt  tttagtctcg  gattgtaagg  480
tttccatctc  tgtaccttct  cacaaagaag  agtcagggcc  caagcttaat  gacctgtttt  540
ttaattcagg  aaggtaaata  tcgttctctc  gtcacaccgc  gaattacagg  tccatttgtc  600
ctcagtggga  gttgatcttt  gattcctaca  aagaacaata  aagtcgggtg  aattcccata  660
aaaaaaaaa  aaaaaaact  cggggggggg  ccccgtaac  c  701
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<210> 175

<211> 1181

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<400> 175

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ccaaagtgtt gtgtgtgtnt gtgtgagtgg gtgcgtggta tacatgtgta catatatgta 120
taatataatat ctacaatata tattatataat atctatatca ttttctgtg gagggttgcc 180
atggtaacca gccacagtac atatgtaatt ctttccatca ccccaacctc tcctttctgt 240
gcattcatgc aagagtttct tgtaagccat cagaagttac ttttaggatg ggggagaggg 300
gcgagaaggg gaaaaatggg aaatagtctg attttaatga aatcaaagt atgtatcatc 360
agttggctac gttttgggtc tatgctaaac tgtgaaaaat cagatgaatt gataaaagag 420
ttccctgcaa ccaattgaaa agtgttctgt gcgtctgttt tgtgtctggt gcagaatatg 480
acaatctacc aactgtccct ttgtttgaag ttggtttagc tttggaaagt tactgtaaat 540
gccttgcttg tatgatcgtc cctggtcacc cgactttgga atttgcacca tcatgtttca 600
gtgaagatgc tgtaaatagg ttcagatttt actgtctatg gatttggggt gttacagtag 660
ccttattcac ctttttaata aaaatacaca tgaaaacaag aaagaaatgg cttttcttac 720
ccagattgtg tacatagagc aatgttggtt ttttataaag tctaagcaag atgttttgta 780
taaaatctga attttgcaat gtatttagct acagcttggt taacggcagt gtcattcccc 840
tttgactgt aatgaggaaa aaatggtata aaagggtgcc aaattgctgc atatttgtgc 900
cgtaattatg taccatgaat atttatttaa aatttcgttg tccaatttgt aagtaacaca 960
gtattatgcc tgagtataa atattttttt ctttctttgt tttattttta tagcctgtca 1020
taggttttaa atctgcttta gtttcacatt gcagttagcc ccagaaaatg aaatccgtga 1080
agtcacattc cacatctgtt tcaaactgaa tttgttctta aaaaaataaa atattttttt 1140
cctatggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1181
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<210> 176

<211> 489

<212> DNA

<213> Homo sapiens

<400> 176

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aatcgctgaa ccaggagcgg agttgcagga ggagaytcac cactcacttc agcctgggtga 60
cagrgggagc tctktcttaa aaaaaaaaaa aaaatcatct gtaaaataaa ttccgggata 120
gtcgttttgt tcaaggaaat gttttgtaaa ttgagctcac actatataat ctttattgtc 180
ctatcctgat gtataataca gcaggataaa ttacaccaag cgctatagtt ataaatatgg 240
catgaagtga actatggcct tttatttcct tccagtgtga acacagcagg tgtgagatgt 300
catcttgga gacaggcctt gcagaaatag gcctacatcc aaaatattat cttgtgactc 360
catgaaccaa tcattaaccc tttgtatctt tgagtgaata ttttactcaa aagttgcac 420
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tggaagttcg aagaaattac ttgaaataaa aataaagatt tctatataga taaaaaaaaa 480
aaaaaaaaa 489

<210> 177

<211> 253

<212> DNA

<213> Homo sapiens

<400> 177

aattcggcac gagcccgaggw caggcacaca ggcccagggtg tgtagggccac agcagccgca 60
gtcctgaaag sctgcaacac ccagacctcc aggagagacc aggcccagga tgcctcgcct 120
gttcttggtc cacctgctag aattctgttt actactgaac caattttcca gagcagtcgc 180
ggccaaatgg aaggacgatg tkattaaatt atgcggccgc gaattagttc gsgcgcarat 240
tgccattttg ggg 253

<210> 178

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (214)

<223> n equals a,t,g, or c

<400> 178

aattcggcac gagagcttat tcattgaagg agtaagtggc tgctcactcc tttctgctga 60
aactctttcc tgccttgta gcctagtgtg gaatgggagc agggtcacag tgaaagagct 120
gaatctcccc acccaccac actgcagcag gctgcggctg gccgacttgt taattgccga 180
gcaggaacac agcagcaagc tgcgggcacc cctnacttgc tacagttgat ggctgtgtgt 240
ctctcccagg acctagagaa aacccgscct gtgtacgagc gcatcactat cggcacattg 300
ttcatgtcct tcatgaacgr gtaaaactgct gtttccgtgg rttttcaaaa aaaaaaaaaa 360
aaaaaaaaa aaaaaaaaag ctcgagggtg ggc 393

<210> 179

<211> 465

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<400> 179

attataagcg acgatgggtc tggtgctatg aacacagcag tcggtcacctg tcattgtcca 60
cccaggagtg gccttggtta ttccaagtgg catgtatctt ccctctgagc ttcatctctt 120
caagatgctc tgggtggtgg gatgggagac catcctgcag ccctcctcag accttatcaa 180
ttcattgaga gattgcaaag ctgaaagcac ctccggccac tcctgggaga cagacccttt 240
ggtgatgaaa taaaccagtg acttcagagc ctatggtctc aactgtgctt gaaaaacact 300
gtctctgaaa acaactttgt gattctccct gtcctctgtg gacaaaagca cataattctg 360

ctgttacggg tacttgnstc atacgagctt tcatgttcag catgcaatgg aatcatgctt 420
gtccatgtga aataaatatg gctctctcgt gtccttaaaa aaaaa 465

<210> 180

<211> 532

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (140)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (496)

<223> n equals a,t,g, or c

<400> 180

cttgggttca gggaaaccag agattatacc aagacgggtc attctgcgcc atggaaaaca 60
tccttggnat ttaattgctg ctgacaataa aggttaagggc tgggcttgga tacagcattc 120
cccagataga gatgctagan aaagtgcata gctatggggc gcacagctct gtttgccttc 180
atcattgtaa cccgtagaaa gaaaacttga gtaagggtcaa ggtttccatg ctttccttaa 240
agtgtggagc cttttattcc atgaaaaggc tatacaaaaa tccagggttat caagcaaata 300
aacaagcagt tcttactcag ataaacaaga tacacccctt caccctacct gctcaatttc 360
tctttctcca ctccccaaa cccacctcca ttgtagtctc tgcagggggc cccgtaagyt 420
tattttgaaa atcactaggc tgggctkggg cgcggtggst tcaggatgtw aatyccagca 480
ctttgggggrg ggcccnggga aggcagttca ttttgggggc aaggggtttt tg 532

<210> 181

<211> 814

<212> DNA

<213> Homo sapiens

<400> 181

aattcggcag agtaaaattc aaataattat aagcatttgg caaaaacaag agaaaagaaa 60
cttgccatat ttacaagct gcaatttttag aaaagcttta acttaatgat agttttatca 120
ttgttttctt gtcccaaact tatccagggc catagaagta tgaatctaata taaaacagaa 180
atgggaatta ttgcacagaa atgggaaata actaatttta aatcagtcaa attggcttct 240
tattaaatac aataattctt atgraaatca tagtacccta ttttcagaca cagctgccag 300
tttacacatt tctcagtatc ctgaarggra aaaagtatag ccccrcttat actatgtaaa 360
attaccaata aaatatTTTT atgactacag attttgcatt tttgtttaca actattttaa 420
gagttttatg ttgtatttag aatttcaacc tagaaaccac acagtactta aattctcctg 480
gggtctcctg ctttctctta accatttgct taatatatat ctacctaaag gagacttctg 540
aattgtaaat gaacttaaaa atagaatgtg gatgcaaaat atcacataag acatcatgat 600
aacatttgaa gaaaaaataa aactgtagac cctaacagtt gtgatatttg gtggkttcat 660

gtggtaatgt aattttctgk ttaattacag tacttttttac aggcacagtg gkactgtctt 720
ttttgtaaga tgcyagttgt gaaatacaat taattgcata cagtaaaagt ctgtgattaa 780
aacatttata tacctcaaaa aaaaaaaaaa aaaa 814

<210> 182

<211> 317

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (315)

<223> n equals a,t,g, or c

<400> 182

taattcggca cgaggaacca ctgttcctta caggtaagcc agcatgatag ttagaccaaa 60
ccatcccaat agagacttgg catgcattca acaaacatcc caggcgccta ggggtgtgcc 120
agcaccattc caggagctgc cagtaaagga aacaagactg ctgtgtggcc aggtgcggtg 180
gctcacatct gtaatctcag cactttggga atgccgaagt gagtggatca cctgaggtca 240
ggagttcaag accagcctgg gccaacatgg tgaaacccca ttttttactt aaaaaaaaaa 300
aacttggggg ggggncc 317

<210> 183

<211> 243

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (169)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (181)

<223> n equals a,t,g, or c

<400> 183

tataaaagaa aaaaaaaggc tgtacaaaaa tttcttttrt acagagactg trtaaaagaa 60
aaaaaaaaag aaatacmtgt gttcttaaaa ccatttgtat attttcattt ctagaccaca 120
ctgtagctaa ttattgttat taaatgttaa gataatttaa gtatataana taagtattga 180
nccgggcatg gtggctcacc cctgtaaatc tcagcacttt gggaaggctg aaggcggggg 240
gtt 243

<210> 184

<211> 1148

<212> DNA

<213> Homo sapiens

<400> 184

aattcggcag aggggccata caaaaatttt ggacttgtaa ataccactta ctaaccgggc 60

ctgtaacact gggctaaaca aagtaagccc tgtttactca gcagtgtttg ggggacatga 120
agattgccta gaaatattac tccggaatgg ctacagccca gacgccagg cgtgccttgt 180
ttttggattc agttctcctg wgtgcatggc tttccaaagg agtggagctg tragttcttt 240
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tgcctgaagt acgagaagtt ttcgatattt cgctactttt tgaggaaagg ttgctcattg 360
ggaccatgga accatatata tgaatttgta aatcatgcaa ttaaagcaca agcaaaatat 420
aaggagtggg tgccacatct tctggttgct ggatttgacc cactgattct actgtgcaat 480
tcttggattg actcagtcag cattgacacc cttatcttca ctttggagtt tactaattgg 540
aagacacttg caccagctgt tgaaaggatg ctctctgctc gtgcctcaa cgcttggatt 600
ctacagcaac atattgccac tgttccatcc ctgacccatc tttgtcgttt ggaaattcgg 660
tccagtctaa aatcagaacg tctacggtct gacagttata ttagtcagct gccacttccc 720
agaagcctac ataattattt gctctatgaa gacgttctga ggatgtatga agttccagaa 780
ctggcagcta ttcaagatgg ataaatcagt gaaactactt aacacagcta atttttttct 840
ctgaaaaatc atcgagacaa aagagccaca gagtacaagt ttttatgatt ttatagtcaa 900
aagatgatta ttgattgtsa gataggttag gttttggggg gccagtagtt cagtgagaat 960
gtttatgttt acaactagcc ttcccagtaa aaaaaaaaaa aaaaaaaatt gtaaacatca 1020
cttatattac tttattgcag cttcatcacc agtacattat atgttgtaat atttatttac 1080
ctgatcattt tgatcatttt ctgctttatt ttgctaataa actgtgatgt tacttctaaa 1140
aaaaaaaa 1148

<210> 185

<211> 1971

<212> DNA

<213> Homo sapiens

<400> 185

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agataagaat cactggcttc tatgcgcttc ttttctctca tcatcatgtt cttttacccc 120
agtttcctta ctttttttta aattgtttca gagtttgttt tttttttagt ttagattgtg 180
aggcaattat taaatcaaaa ttaattcatc caatacccct ttactagaag ttttactaga 240
aaatgtatta ctttttattt tttcttaatc cagttctgca aaaatgacct ataaatttat 300
tcatgtacaa ttttggttac ttgaattgtt aaagaaaaca ttgtttttga ctatgggagt 360
caactcaaca tggcagaacc atttttgaga tgatgataca acaggtagtg aaacagctta 420
agaattccaa aaaaaaaaaa aaaaaaaaaa aaaaagcaaa actgggtttg ggctttgctt 480
taggtatcac tggattagaa tgagtttaac attagctaaa actgctttga gttgtttgga 540
tgattaagag attgccattt ttatcttggg agaactagtg gtaaaacatc caagagcact 600
aggattgtga tacagaattt gtgaggtttg gtggatccac gcccctctcc cccactttcc 660
catgatgaaa tatcactaat aaatcctgta tatttagata ttatgctagc catgtaatca 720
gatttattta attgggtggg gcaggtgtgt atttacttta gaaaaaatga aaaagacaag 780
atztatgaga aatatttgaa ggcagtacac tctggccaac tgttaccagt tggattttct 840
acaagttcag aatattttta acctgattta ctagacctgg gaattttcaa catggtctaa 900
ttatttactc aaagacatag atgtgaaaat tttaggcaac cttctaaatc tttttcacca 960
tggatgaaac tataacttaa agaataatac ttagaagggt taattggaaa tcagagtttg 1020
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tgtactttga gtataacatc aagctttaac aaatatatta agacaaaaaa atcacgtcag 1140
taaaatacta aaaggctcat ttttatattt gtttttagatg ttttaaatag ttgcaatgga 1200
ttaaaaatga tgatttaaaa tgttgcttgt aatacagttt tgcttgctaa attctccaca 1260
ttttgtaacc tgttttattt ctttgggtgt aaagcgtttt tgcttagtat tgtgatattg 1320
tatatgtttt gtcccagttg tatagtaatg tttcagttca tcatccagct ttggctgctg 1380
aatcataca gctgtgaaga cttgcctttg tttctgttag actgcttttc agttctgtat 1440
tgagtatctt aagtactgta gaaaagatgt cacttcttcc ttttaaggctg ttttgtaata 1500

```

tatataagga ctggaattgt gtttttaaag aaaagcattc aagtatgaca atatactatc 1560
tgtgttttca ccattcaaag tgctgttttag tagttgaaac ttaaactatt taatgtcatt 1620
taataaagtg accaaaaatgt gttgtgctct ttattgtatt ttcacagctt tgaaaatctg 1680
tgcacatact gtttcataga aaatgtatag cttttgttgt sctatataat ggtgggttctt 1740
ttgcacattt agttatttaa tattgagagg tcacgagttt ggttattgaa tctgttatat 1800
actaaattct gtaaagggag atctctcatc tcaaaaagaa tttacatacc aggaagtcca 1860
tgtgtgtttg tgtagttttt ggatgtcttt gtgtaatcca gcccatttc ctgtttccca 1920
acagctgtaa cactcatttt aagtcaagca gggctaccaa cccacacttg a 1971

```

<210> 186

<211> 366

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (366)

<223> n equals a,t,g, or c

<400> 186

```

aataacaatg taattatttt yggcakascc ttgcctgact tctgaggacc tactaagtc 60
tagttctagc cttttagaaa tgggtcaactt ctttcatcaa ggctttgggt tcattactgg 120
tgtctgaatt agttccactc ctagcttgac ccagatttta gtttttatta tggatttttt 180
cttcaaactt gtttatttaa tattaagttt tcatttttgg cagcatatgg atgattttat 240
ttttaataat catatctctt agtaaaactaa tggktaaata atattaaagt ataagaggct 300
aaaattgggc caggtgtggt ggctcacgcc tgtaaatccc cgcactttng ggnggctgag 360
gcaggn 366

```

<210> 187

<211> 350

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<400> 187

```

aattcggcac gagaaagagt tgccaaaaat aaaaaatatt attgtaaggt aaaaaatttc 60
ataaatgggc ctaatagtgg gatggatata actgaaaact aagatggtga tgaggaagac 120

```

```
agtcaagaat aaatatacca aagtagcaaa gaaatacctg tgcaagtaga atagcttgct 180
tcaaacagat gagatttgct ctcccaacat caaaacatat cacaaaacta cagtaattaa 240
gtccctttga ggccagcact gactgggrta agcaaatagr taaatgggat gtaacaggcc 300
ttatttcaac taatagggtg ttcaccactc ctagttaggt ncctgtttcc 350
```

<210> 188

<211> 375

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<400> 188

```
aattcggcac gagtgtaaac accttttnata caaatgccat catcccattt ttactgatta 60
gaaaaacttt gctattaata ggtgcaaagt ccatttcagg tataattggg aaggaactga 120
gtgcactcat gggaagaaac cttgttttgt tttttgttcg cttttcttct tatccccctt 180
tctcagtttt atggctggag acatgattta ttgcagccat ccatcttggg ggctcatcca 240
tcacacccgg gttgctagga gattgtggca gcagctgttt gctctgaatc agacagaaaa 300
gttgtcaatc atcaaaggca ggtgaatagc attagaaaca cgstattgtc agacggaata 360
attaatcaaa gagag 375
```

<210> 189

<211> 365

<212> DNA

<213> Homo sapiens

<400> 189

```
tcagacaaaa attctgtgga cagctgcgag gaattcactt ttctcttgaa actcatagcc 60
ctctcctgaa tacatatggt gtgcactaac acttgccatt atctgaaact catagcccta 120
tcctgaatgc atatgctgta ggttaccact tgccattgga ggtcttggag gccatatact 180
gtaggagcag ggtagccatg ggacttaact actattatcc cccaaaaatg ttgtgtttgt 240
gaattcacct gactgaggaa tccctaawta ttcacagat atttcaaaaag grtccatggt 300
ccmaagragg rggttttagta ttgatttttg gttgggtttg ttttatttga ggcagtgggg 360
gatga 365
```

<210> 190

<211> 817

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (778)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (791)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (801)

<223> n equals a,t,g, or c

<400> 190

```
ggcacgaggt taattttgaa acttatgctt aagatttaac cagggcagag gcatatttca 60
gcataaataa tgttgccatt ataaactctt atccttccta tctcaacagg aaatgagcaa 120
ttattgcttc atgcttcaat gcaactgtttt aaaataactgt ttaatttggt aaagggtgtga 180
actgtttaat ttatctcaca cgttttttta aacaaataact gattggacat gcgctgcacg 240
ccaggccttg ggcttggtac ctcagggttc tcacagggga ggctggaagt ggaaacaagc 300
acatgtgtaa ctggtgtgta gacagtctaa ttggtagaaa atcagcgaac aaagaagcag 360
acaaattaga aaatgaacgt aaggatgatg gctaaaaaga gggtagccat tatgtcagtg 420
tccttcagag aaggtagcac tccctgagac cggaatggca gaaagaagtc catcctgcct 480
agcccagctt ggacttggtg agaagcaggc tgataaaaga accaaatatt gtacattttg 540
aagaagttgc ccgctgactt gagagagagg tgttgcgttt cagggtgctga atgtccttat 600
aaaaagttga atatttcgag catctctatc aatacatttg aatgctgaga gcttttcctt 660
ccagaagctc atgtcatttt caacacacac ttctattttac ctttatgtag tttctaaaaa 720
ttgaaaacca gaattggagg tttttttaa aaaaaaaaaa aaaaaagccg aggkgggnaa 780
agtamaaatg ngcctkwgcc ntttcctttc cccgtcc 817
```

<210> 191

<211> 590

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (569)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<400> 191

```
aattagaaag tccaaagtcg acccaaattg atattatggg cagaagtatg gtagagcaat 60
ccaaacaatt gggattatga atgggaagggt tgtaaaccce atattatttg cgtgtacgaa 120
ggaagaatcc tgtgacaagc acttactcca aaatgagtct acagttatac caagtggata 180
gtagaactta tctactggat ttccgtagta ttgatgatga aattacagaa gccaaatcag 240
ggactgctac tccacagaga tcgggatcag ttagcaacta tcgatcttgc caaaggagtg 300
attcagatgc tgaggctcaa ggaaaatcct cagaagtttc tcttacctca tctgtgacct 360
cacttgactc ttctcctggt gacctaacct caagacctgg aagtcacaca atagaatttt 420
```

ttgagatgtg tgcaaatcta attaaaattc ttgcacaata aacagaaaac tttgcttatt 480
tcttttgcag caataagcat gcataataag tcacagccca atgcttccca ttgtaatcca 540
agttatacct aatttttaac cgggggttng ggntttngga ttgcaatttg 590

<210> 192

<211> 308

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (302)

<223> n equals a,t,g, or c

<400> 192

ggcacgagaa ataaccagct gacagcatga cgacaggata aaatccacac ataccattac 60
taaccttaaa tgaaaatggg ctaaatgctc ccattgaaag acacggggca agctggataa 120
agaaccaaga cccactggag tatgctgtct tcaagaaacc catctcacat gcggtggcat 180
acataggctc aaaataaagg aatggagaaa aatatttcaa gcaaatggaa aacagaaaaa 240
agcaggtgtt gcactcctac tttctgacaa aacagrctwt gcggnntaaa ggtkaaaaaa 300
gnggaagg 308

<210> 193

<211> 343

<212> DNA

<213> Homo sapiens

<400> 193

aattcggcac gaggcctgga gaacctatgg tgattttcct gggcctgctc attgcccacc 60
attgaaccaa tcagcacaca tgtcctctct tctgagccca taaaaccct ggactcagcc 120
agactcacac agacatcagg actaccagct gcgggaagga gctagccatc tcaggtctcc 180
ttgaatcatc cagatgacct gcctgtggaa aggagctacc catcacaggt ctacttcctg 240
atgagaactg gacattcttg ggatgacttg cctgcagaaa ggagcgacat attttgggtc 300
tyctgagagc tgttctgttg ctcaatgaag ttccttcag cag 343

<210> 194

<211> 690

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<400> 194

```

aattcggcac gagaggtgat atacatgata cattctcaag agttgcttga ccgaaagtna 60
caaggacccc aacccttttg tcctctctac ccacagatgg ccctgggaat caattcctca 120
ggaattgccc tcaagaactc tgcttcttgc tttgcagagt gccatggtca tgtcattctg 180
aggtcacata acacataaaa ttagtttcta tgagtgtata ccatttaaag aatttttttt 240
tcagtaaaag ggaatattac aatgttggag gagagataag ttataggag ctggatttca 300
aaacgtggtc caagattcaa aaatcctatt gatagtggcc attttaatca ttgccatcgt 360
gtgcttggtt catccagtgt tatgcacttt ccacagttgg acatgggtgt agtatagcca 420
gacgggtttc attattattt ctctttgctt tctcaatgtt aatttattgc atggtttatt 480
ctttttcttt acagctgaaa ttgctttaaa tgatggttaa aattacaaat taaattgtta 540
atttttatca atgtgattgt aattaaaaat attttgattt aaataacaaa aataatacca 600
gattttaagc cgtggaaaat gttcttgatc atttgcagtt aaggacttta aataaatcaa 660
atgttaacaa aaaaaaaaaa aaaagtcgac                                     690

```

<210> 195

<211> 237

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (222)

<223> n equals a,t,g, or c

<400> 195

```

tggaatctgg ctagaaagca gtaataaaca gaaatctgta tatgtttgga aaaagtaaata 60
ctcaatggaa atcagaaaat attttgaact gaaatttggt gatgaaaata ctatatatgg 120
aaacttgtag gatataattat agctaaagct gtgtagagg aaatttagag ccttacataa 180
atacatatat tataaaaggg aaaatattaa aagttaatgg anctaaggca tccatct    237

```

<210> 196

<211> 267

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (261)

<223> n equals a,t,g, or c

<400> 196

```

cccagagta gacacatctt agtatgtact cagctttggg caaaanatag atggcgctcac 60
ctttcttcgc atgctgagct ccatagtaga ttgaggactt gggttggaag cagtaaggta 120
attgccaaag cccattatc aggtgggtac acatagagct tttgggagga acagatgcc 180
taagttatca gtttagtctt acctctctt tagagggaaa agaagttgga gaaagcgtct 240
gcagctaaca aaagtactg nccttgg                                     267

```

<210> 197
<211> 443
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c

<400> 197
attgccaatg ataaaatttg aactttcaag caaaaatgca aattttgga aatgtgttat 60
ttctgccact gagaacataa cagcatacca acacttttag actttttact tttatatgt 120
ataatgaatg catcaacatt tggatgatct gtattacagg tgaaccaaca ttttccagta 180
ttagtggtgg ggaatgaccg tgtcwgaagg cttgaccagg atggggatag ctcaaggagg 240
caggatggct cattgcttat gtcttcttca ggaacacaat gaagtaggtt gagtttccag 300
gatttgggcc ctgcattggg gatggttgga ggaaaggcca aaaacctagg ttcttycags 360
ccatgggctt taaaaaacgt ggtacttttt aaggaacagg gttcanggca ggggtgtttt 420
tggggctagg gttaaggaaa atg 443

<210> 198
<211> 208
<212> DNA
<213> Homo sapiens

<400> 198
gaaaatgtgc ctttttcagt tgtcacagmt gggaatgtt actggcatcc ggtgggtaaa 60
ggctagggat gctgctagac attctacggt gcacaggaca acccccacaa caaagaatta 120
tctagcccaa aatgtcaaca atgctgaggt tgagaagycc taggaaacta aaacagtgtg 180
gggggttgta atttattgga aaccatgt 208

<210> 199
<211> 258
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<400> 199
attggttttg gccatgacac tgatttcctg gaggaagggt gctgcttcya ttcaggaatg 60
gggggtgcatg actgccctga gcagccaagg agccaattct ttaggaggct gaggccatt 120
tcagctcaag ccttcacggg gcagggccaa aagcaacttn gaggggtggg tggagcatct 180
tccactgcag cttggcccca agaaataggw tgtagcagca gytcagcttg tgggatgggtg 240
cgcaacaatt tggggggg 258

<210> 200
<211> 893
<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (870)

<223> n equals a,t,g, or c

<400> 200

```

aggggtagtt tccacaatct aatccgggtg ccatcagagt agagggagta gagaatggat 60
gttgggtagg ccatcaataa ggtccattct gggcagtatc tcaactgccg ttcaacaatc 120
gcaagaggaa ggtggagcag gtttcttcat cttacagttg agaaaacaga gactcagaag 180
ggcttcttag ttcattgttc ccttagcgcc tcagtgattt tttcatggtg gcttaggcca 240
aaagaaatat ctaaccattc aatttataaa taattagggtc cccaacgaat taaatattat 300
gtcctaccaa cttattagct gcttgaaaaa tataatacac ataaataaaa aaatatattt 360
ttcatttcta tttcattgkt aatcacaact acttactaag gagatgtatg cacctattgg 420
acactgtgca acttctcacc tggaaatgaga ttggacactg ctgccctcat tttctgctcc 480
atgttggtgt ccatatagta cttgattttt tatcagatgg cctggaaaac ccagtctcac 540
aaaaatatga aattatcaga aggattatag tgcaactcta tgttgaaaga atgaactacc 600
tcactagtag ttcacgtgat gtctgacaga tggtgagttt cattgtgttt gtgtgttcaa 660
atTTTTaaat attctgagat actcttggtga ggctactcta atgccctggg tgccttggcc 720
agTTTTagaa ataccagttg aaaatatttg ctcaggaata tgcaactagg aaggggcaga 780
atcagaattt aagctttcat attctagcct tcagtcttgt tcttcaacca tttttaggaa 840
ctttcccata aggttatgtt ttccmgcccn rggsatgggg ggtcattggg gcc 893

```

<210> 201

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<400> 201

```

aaactcactg gctgaaggag gaaatTTtag aaggaagcta ctaaaagatc taatttgaaa 60
aactacaaaa gcattaacta aaaaagTTta tTycctTTt gtctgggcag tagtgaaaat 120
aactactcac aacattcact atgtttgcaa ggaattaaca caaataaaaag atgcctTTtt 180
acttaaacac caagacagaa aacttgccca atactgagaa gcaacttgca ttagagaggg 240
aactgttaaa tgTTTTcaac ccagttcatc tgggtggatgt tTTtgagggt tactctgaga 300
atTTtgctta tgaaaaatca tTatTTTtag tgtagttcac aataatgtat tgaacatact 360
tctaatacaa ggtgctatgt ccttggtgat ggtactaaat gtgtcctgtg tacctTTTgc 420
acaactgaga atcctgcagc ttgggtTTta tgagtggggg catggaataa ttatgggggn 480
atgtaaaaaa aanaaaagag ggg

```

503

<210> 202

<211> 438
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c

<400> 202
catgtgatca tttatgtgta tacagagtaa ttataaaatg tttgctgtgt acaaaaactat 60
tttatttagtg gatttttaa atattaaaatg ggtatatata gtatatatga tctaggagta 120
tatataggga actctaacaa atttataata tttatttttt aaaagaatga ccaaaccatgg 180
caaaatatta ctatgagtta gatctggaca gtggatgcaa gggctctcat tatgttattg 240
tctgattttg tgttgaaactt atttcacaat gcagaggaaa aaatagtctt ggctcatcct 300
tagatatcac tgttcataga gccagtcacc aggacgatcc cacnttttat ggtgggccag 360
gcattgggag tccagagccc atcacccaac naccaagtga cgggtgggga cncgtggtgag 420
cctgnaaaagg gggccatc 438

<210> 203
<211> 876
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (778)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (786)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (804)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 203

```
cggcgatata tactaaattc gcgcgtgact tcatgagtag tagtgaatac aatcttcctg 60
cttctaagct tgtgtctact agaatgtctt cccctaataa gatataattg aatgtttccc 120
atgtttcttc tagtacttta atgcgtttca ttttcata ty gaaatcattg atctacttct 180
agtttykgat acaamatgtg agccaggaaa cccagttttt aaatttcaaa tagctgtcca 240
ggtgtccctg cacctcttat gcatgagccc tcgctttgtg ccaatgtgga gtgcccgcct 300
gctcacacgt gcccatgtgg agtgcccgcc tgctcatgtg cccatgtgga gtgcccgcct 360
gctcacacat gycgatgcgg agtgcccrrc tgctcacaca tgcccatgtg gagtgtccgc 420
ctgctcacac gtgcccattg ggagtgcccg cctgtctaca cacgtgtcca tgtggagtgc 480
ccacctgtc atgtgccc atgtggagtgc cactgtctca catgtgccga tgtggagtgc 540
crcctgtc caacacgtgc catgtggagt gcccgcctgc tcacrygtgc cgatgcggag 600
tgcccgcctg ctcacacgtg ccgatgcgga gtgcccgcct gctcacacgt gccgatgcgg 660
agtgtcccgc tgctcacacg tgcccatgcg gagtgtccgc ctgctcacac gtgcccgcgc 720
ggagtgtccc cctgtctaca cgtgtccgac cggagtgtcc gcctgtcac acgtgtccnac 780
gcggantgcc cgctgtctca cacntgtccga cgcggantgc ccgcctgtct acacntgtccc 840
atgtggagtg ccgcctgtct acgtgtccga tgtgga 876
```

<210> 204

<211> 1504

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1494)

<223> n equals a,t,g, or c

<400> 204

```
tgtnytccmt gtgcnacaac cygcygcaga ctggggcccy tctcagttaa ttgggtttca 60
caagcaataa tttctccaca acaaaaacca caacttgaag tgagttgaaa agagatcaat 120
agtggaaaca gtcgcctcag tactttttct ttctggattt catctctaga aatttgaagt 180
gtttgagaca gagtccaccc tttgtgcaag gcgagaacca atgaatggac tccttggtgtg 240
aattattgca tcttcttcca aagcaggttc atcaagactt tcacagagat tcatttttgt 300
tgagaagtaa gggttaatag gaggatagaa tttggatcca aatctagtga taaaagtgtc 360
caagcaatca aaaagtaaga ttttttaggg acataccaac atcttccctt tctgctaatt 420
tcatgtcca aagatatrgc aaaaaaaaaa atcataaaaa gtgcttttgc cctacttgtg 480
ttctagtttt cccatggcag aattttgtaa ttacatccag aatatagtgt atattttgtt 540
cctcaaactt tattacattg gatggatatt gttgractgg ggcactggtg cctatatca 600
aggctctttc ctatcaacgt gtctgtccac gatttggtgt gtttaaagct tcattttgaa 660
aatcactgt cccctgtgg gtagtgactg tattgttttg ttcatgtcta tgtgggacac 720
attgcatcac atggcaaacc aactctctgt ggatgtgaga taagtactta taaaaccagc 780
ttgaaaacat cgtcttatgt attatgtcat cctgcatcat aatgcaatta tgtgtatcat 840
aacatgtca tttaaaaaaaa gagaaaccag caaattcatg tttgtccata gaagaatgta 900
ctcagaactt tgtgttgtga aacgatgaga acagaccacc ttaagatac ccacctgcca 960
cttaaaatga cttagttata attagtagta gtctagacgt tggtcttgggt gtgtgggggt 1020
caattctaac gtcatgttct tttgaataaa tctctcagtc atatttgaaa aaaaaataca 1080
tggaataaaa gaaaaatata atctttggcc aaatcaagca ggcactcttt ttcttttcct 1140
tgacgtttag ctcatatac gtggtgattg gatcacgaga tctgtccgtg tgaaaataca 1200
gaaacatcct ttagtttaca aaacagttat tctaggcttg aagcctctgg aacagcaaata 1260
tgaatagatg ggctgcatct gatttgcttt atggatgtaa ttttcaaaa cactcttggg 1320
tctctgaccc cagggagtta agagtgccca gaggagggtc tacacattaa aggataaagc 1380
ccccagtgta tgctggcagc aaatgtgttg agttcttaaa tcttccattt ggktttctgk 1440
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ccca 1504
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<210> 205

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<400> 205

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aaccagaggg catagaattg gggcttagtg tgtcctaaac aagctaaaag attccacctg 120
tagaatcata aaatgagagt ctcacacagt ttcatgctac tttttgtctc ttcagcaagg 180
aacggttgct gggattgtca gtgaccaggc atgtctggat agcttcacac atacacataa 240
tgcccgggtc acctcagccc acacatgttc tagaagtagc cacttgccaa gtgtcagtgt 300
tcagtctaaa cagcaaattg gttaaccaca tgaacagcac tggcccatgt gagaatggtg 360
tgaaggcctc ctttgtagca ttttccattt ctctaactca catgtgtagt ctcagcactg 420
cagaggacag atttgtttgt gccctctgag actggttgggt tggttggttg gttagttttg 480
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ttttatgaat cctaaaattt gtcttggsct gttaaaaaaa aaatt

525

<210> 206

<211> 2494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2485)

<223> n equals a,t,g, or c

<400> 206

caaagaaaca ttggaaacaa tttctaataga agaacaaaca cctcttctta aaaagattaa 60
cccaaccgaa tctacttcca aagcagaaga aaatgaaaaa gttgattcaa aagtgaagc 120
tttcaagaaa ccattgagtg tatTTaaagg ccccttacta cacatcagcc cagcagaaga 180
actgtacttt ggaagtacag aatccggaga gaagaaaacc ttaatagtgt tgacaaatgt 240
aactaaaaat atagtggcat ttaaggtgag aacaacagct ccagaaaaat acagagtcaa 300
gccaaagcaat agcagctgtg acccgggtgc atcagtggat atagttgtgt ctccccatgg 360
gggtttaaca gtctctgccc aagaccgttt tctgataatg gctgcagaaa tggaacagtc 420
atctggcaca ggcccagcag aattaactca gttttggaaa gaagttccca gaaacaaagt 480
gatggaacat aggttaagat gccatactgt tgaaagcagt aaaccaaaca ctcttacgtt 540
aaaagacaat gctttcaata tgtcagataa aaccagtga gatatatgtc tacaactcag 600
tcgtttacta gaaagcaata ggaagcttga agaccaagtt cagcgttgta tctggttcca 660
gcagctgctg ctttccttaa caatgctctt gcttgctttt gtcacctctt tcttctattw 720
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aaaagtaaca gacctaaac tctaccaagc tactaaaamc attgcacatc tgtgcttctt 840
aaaaggaaat atgcagcacg tggaggggaa cacatacatg tcttgaaaat aaactgctag 900
aataaagaaa tgctggagaa attgattata agagactata gctatttagt aaagtaagta 960
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gaatactttt aaagcttaag ttttatcgtg taaatacatt agctaaactg aaaagtataa 1080
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atgtaactca tgatgatctg tgaaaccttc aaactaggac caattgactt acttgatatt 1920
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cagtagcaga ggcaatgaca tgagtttggt ttctcattaa tatgaccagt ttgggtctat 2040
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gttgagtttc gattgagcca tgtttgagaga ttttattact attctgaagg gtagtggtgt 2160
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ccttcaaaat tggcctagga aataaaacct taaaaggaca ctggtgtgct actttgtctt 2280
aatttgggct tttctgtttc agtttgccac ctccagctgt gaaatggact gcagtcacc 2340
ctaagtactg tgcacagtat ctccctgtgt gtgtgcacag tggcttcccc ttacatggta 2400
gatttttggc cttaataataa tctaataccca aagtagttgt gtatgttttc tgttccttgg 2460
caataaaatg naggaataat ttagnccaag attg 2494

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<210> 207

<211> 880

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (864)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (865)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (868)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (878)

<223> n equals a,t,g, or c

<400> 207

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tggcagcata ggttctcccc cagggtgggtg ctgaacttca gctcagaagc agcctggacc 120
ccatcttacc tccagataag gtgttttagg tactctgttg ccagtgttag tgcaacttag 180
tttaaaaata gaggacttgt tcacagtatg ctctaagtct cacactggag ttttgtgcaa 240
cataaagtag gtgatttttg agcagagcga agtctagaaa ttgccttaa attatttgtg 300
gtactctaga gaacgtggta tgtgtatgtg tgtatgtgtg tttgaatata ggaactagtt 360
cattgaacgt tagattgttc taagaccaga attagattaa aaatgcataa catattaagt 420
attaaaaagt gtttatattg tatatgaatt ttttgcggta agtttagctt ggcatttttag 480
gttttaattg atgcttaatc tgttaaaatg atgtactgta ttttaaagta ttctaattgt 540
gcttttttgt accatcttca gtatgaaaaa tgctcagtatt tagttccttt ctcaaggaca 600
attagatttt tattgacatt gttttcccc ttaactcatg taattagtca tagcaaccaa 660
gagtcgaagag agtgattacc agccaattaa gaaaaatgtg accaagcaga ttgcagagta 720
caataaaacc atcgtggatg ctttacatag catcagcgga aactgagttt aagtccactg 780
aaagtctcta aggaagtatc ctcttgctgc taaacttggt acaagttgac taccaaaaaa 840
aaaaaaaaaa agccgaggkg ggcnnngtnc aagggccntg 880

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<210> 208
<211> 640
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c

<400> 208
tnagnaatg gacttggtc tgtaaaggat ggggaacctc acttcgtggt ggtccactgc 60
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gaggtcttcc aggagatgct gtccatgctg ggagatcaga gcaacagcta caacaatgaa 180
gaattccctg atctaactat gtttcccccc ttttcagaat agaactattg gggtgaggat 240
aaggggtggg ggagaaaaaa tcaactgtttg tttttaaaaa gcaaatcttt ctgtaaacag 300
aataaaagt cctctccctt cccttccctc acccctgaca tgtacccctt tcccttctg 360
gctgttcccc tgctctgttg cctctctaag gtaacattta tagaagaaat ggaatgaatc 420
tccaaggctt ttaggactgt ctgaaaattt gaggctgggt gaagttaaaa cacctttcct 480
tatgtctcct gacctgaaat tgtatagtgt tgatttgtgc tgagatcaag aggcaggtta 540
gawgaacctg acatccactg yttgccttgg atagtatggc ttgwttttgg aaagaaattc 600
tgaagagwgt ggaaggagag gagaaatgtc ctcatatttg 640

<210> 209
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c

<400> 209
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tgaggaaaagt gaggtcaca gaagttaatt ggcccagggt cccacaacta gtcagtgcag 180
agggtgggggra acataaccag atttgttcgg catgkaactt gtgccaaatt tcctccaaag 240
ttcttcaaag ggcaaggcat gtttatttta tcccaattta ggcataccaa caactttaat 300
act 303

<210> 210

<211> 1168

<212> DNA

<213> Homo sapiens

<400> 210

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ggcacgagcg gcasgasctt gtctgaacat aatgatttca aaatttgagc ttaaaaatga 60
cactctgaaa tccagtcagt gtgcctcact agacttttctg atttcaagat tttctgcaga 120
aaatgttttg aaaacttttg atacttaaaa atggcagggtg tagtattgca ctttgctagt 180
tgctcagata ccctttttta tttgtataga tattctgagt tccttttttt ttctacatgt 240
tgtacgttgt cgaaagctaa aaggaaactt atccttggat cacggaaggc agaggcattt 300
ggtgagatgg aaacaaggat gtgtaaaaat gagacgacca cctctcggat taaaaaaaaa 360
aagtgccaga gttctagggt tctaagtgat gtccaggaag gaggaggaat aatatttatg 420
gagcatatat tatggaacac agcaatcagg atgagtgaaa aattgatttg cagctgacct 480
gcaaatggaa tcatcaggaa catccctttc tcatggagtc ccttaattta caagttaact 540
gcaaacatag gagatgatag ttccaagaag gaacatttta tcgtctttgt ttttaatctc 600
aagaatggta cctaccatca gtgaatgacc tggtgcagtg ctttcattga agtggtcttc 660
gttcctcag caatatgatt gtgatgactg aaaaaggga actgtgccac tatttgtacc 720
atcattttca ccaaaatcta aaaatgcttt ttatgacgta tggagacatt cttcatgttt 780
gtttcagtg acactccttg cagatgtaaa aaactgagaa aactcacttt tggaaagtga 840
cctaaagagt gtcattgaag tgaattttta gtaggcacga tgattgtwtt catggttgct 900
gttgatcat atctcaggag ctggaatgac agacattatt gaacaaagaa atcaggatag 960
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tttcastaat cacagggtaa atataaaatt gattcattaa aaatgtttca taagaattca 1080
aaggacatag aattttgtga aatgtagtat ttttacttaa gtgcctttac tctgcttcta 1140
ccccacagcc aattttttat aaaccagt                                     1168
```

<210> 211

<211> 3133

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3069)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3114)

<223> n equals a,t,g, or c

<400> 211

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aaggccagtg ccagcttga aggttctgtc accttttgca gtggtccaaa tgagaaaaaa 120
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gtggaaaatg ggaggcatga aatacatcctt ttcggttggtg ttcttttcttt tgctagaagg 180
aggcaaaaaca gagcaagtaa aacattcaga gacatattgc atgtttcaag acaagaagta 240
cagagtgggt gagagatggc atccttacct ggaaccttat gggttggtt actgctgaa 300
ctgcatctgc tcagagaatg ggaatgtgct ttgcagccga gtcagatgtc caaatgttca 360
ttgcctttct cctgtgcata ttcctcatct gtgctgccct cgctgcccag aagactcctt 420
acccccagtg aacaataagg tgaccagcaa gtcttgcgag tacaatggga caacttacca 480
acatggagag ctgttcgtag ctgaagggct ctttcagaat cggcaaccca atcaatgcac 540
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ataggggaaa atgtaaaatg ttcagtcttt atggacaacc tgggcataaa ggagtccaat 3060
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ttcaccagcc acc 3133

<210> 212

<211> 680

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<400> 212

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tatatttgtt ataactatat tttatgttgt atgttatcag gagccatcag agaatgacct 120
ttttgtgttt ggaacacttg gttccatgaa aagtatgctt tgtgttttaa ctgttaaaat 180
aatttaaaaa ttaattattt tacataatta aagaagttaa aaactattaa cattaataaa 240
tttcacaatt tcaacatgtc aaacctatga agggagatag gaaacaatga gaaacttact 300
tttgctcctt tatacagrat tattaactat attttactaa ctaaaaaact ctagtattct 360
ttacctaaag tcaattggct ggtaagaggg agagatgcaa aattctccag ctctgaactt 420
ggagctactt cacactctac tcttaatgga aacttgaact aatgatagat agtattttyy 480
tcctctattt aaaatttttg tcttgattag gagatttttc agtttctcca tataaattaa 540
ttttcttaca atcggattct atggcgtagg gcataatttt tggctttatt ttaaaaattt 600
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ggatccaggg gcttcaccgg                                     680

```

<210> 213

<211> 563

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (440)

<223> n equals a,t,g, or c

<400> 213

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tacccgtaag acaaaaacttg ttaaagcctc ctgagtctaa cctagattac atcaggccct 180
ttttcacaca caaaaaaatc ctttatggga tttaatggaa tctgttgttt cccctaagt 240
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cctaggtttc agacttttgc ttaaggccmg taatytyaga aaaaaatttc caaatatcat 360
gacagagcgg aaaacataaa gaagtacttg gaccaagaaa aaagaagatg gaaaatatca 420
caagcaaatt aaaatagaan aaaatgcaac aggtttcagt tatgaatcac tttttcgcga 480
attaccttaa tgaaacagtt accgaagttt tgggatagaa aaatccttta ttttaaaact 540
tactcctcca gcttgttata act                                     563

```

<210> 214

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 214

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ccagaaaact ggataataag gatctatttg gaaagtcaga cccatacctg gaattccaca 180
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tgaatccygt ttggasgcct ttcamgatct ctcttaactc actgtgttmc ggagatatgg 300
acaaaacccat taagggtggag tgttatgatt atgacaatga tgggtcacat gatctcattg 360
gaacatttca gaccaccatg acaaaaactga aagaagcctc cagaagctca cctgttgaat 420
tkgaatgcat aaatgagaaa aaaaggcaaa agaaaaaaaag ctacaagaat tcagggtgta 480
tcagtgtgaa acagtgtgag attacagtag aatgcacatt ccttgactat ataatgggag 540
gatgtcagct gaattttact gtgggagtggt acttcactgg ctccaatggt gacccaaggt 600
ctccagactc ccttcattac atcagcccca atggcgtaa tgagtatttg actgctctct 660
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ctcagataaa actctatgga ccaactaatt tttctccaat cataaatcac gtggccaggt 900
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gatagcaatt tacattaatt gcagtaaagc tctttggatt agaaattagt gtggggaaag 1560
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<210> 215
<211> 1822
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<210> 216
<211> 3127

<212> DNA

<213> Homo sapiens

<400> 216

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<210> 217

<211> 1529

<212> DNA

<213> Homo sapiens

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<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<400> 217

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<210> 218

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 218

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<210> 219

<211> 1792

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<400> 219

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<210> 220

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 220

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<210> 221

<211> 1369
<212> DNA
<213> Homo sapiens

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<222> (1347)
<223> n equals a,t,g, or c

<400> 221
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<210> 222
<211> 792
<212> DNA
<213> Homo sapiens

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<222> (573)
<223> n equals a,t,g, or c

<220>
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<222> (585)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 222

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tgcgagaaga cgacagaagg ggagagactt gagggaggcg ctgcgactga caagcggctc 60
tgcccgggac cttctcgctt tcatctagcg ctgcactcaa tggaggggag ggcaccgcag 120
tgcttaatgc tgtcttaact agtgtaggaa aacggctcaa cccaccgctg ccgaaatgaa 180
gtataagaat cttatggcaa gggccttata tgacaatgtc ccagagtgtg ccgaggaact 240
ggcctttcgc aaggagagaca tcctgaccgt catagagcag aacacagggg gactggaagg 300
atggtggctg tgctcattac acggtcggca aggcattgtc ccaggcaacc ggggtgaagct 360
tctgattggt cccatgcagg agactgcctc cagtcacgag cagcctgcct ctggactgat 420
gcagcagacc tttggccaac agaagctcta tcaagtgcc aacccacag gcttgcttcc 480
cccagagacac ccattcttac ccaaggtgcc caccctttcc cttacccaaa aaatcaagg 540
ggaaattttt acccaaaggt tcccccaact ttnggcccaa cgggnaaccc ccaaaggana 600
caaaggaggg gtattattca gggttgccc acccanttaa ggttgcaagg aggaaaggca 660
ttttgggggg ggaaccaggg tttggggccc ccaacgttng ggtataaaaa agggttgttt 720
ccaggaggag gattgggcaa agttgttcct attttctttg gttaggagcc tntttaacaa 780
aaccagctt gt 792
```

<210> 223

<211> 921

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (851)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (885)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (895)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 223

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gccccctctg cagtaccccc gccccctcttc tcccaccaca atgagatcct aagatggcgg 60
tggtgcggc gggtggcgct gcgtactgag gtcgaaaagg cgccactgg ggccgaggca 120
gccaggaaac gtgtgggcct ctctgctgag gtctccgagg gccgaccgct gccggcggcg 180
ggtcgtgggg gctgactgtc gctctgcctt tgacaggaga ggctgcttct tgtagaggaa 240
acagctttga agtgtggagc gggaaaggag cagtttctga gctgcaaaaa ctagtttcta 300
aacagagagt taattgttaa atccagtatg gccacaggag gaggtccctt tgaagatggc 360
atgaatgatc aggatttacc aaactggagt aatgagaatg ttgatgacag gctcaacaat 420
atggattggg gtgccaaca gaagaaagca aatagatcat cagaaaagaa taagaaaaag 480
tttggtgtag aaagtataa aagagtaacc aatgatattt ctccggagtc gtcaccagga 540
gttggaaggc gaagaacaaa gactccacat acgttccac acagtagata catgagtcag 600
atgtctgtcc cagagcaggc agaattagag aaactgaaac agcggataaa cttcagtgat 660
ttagatcaga gaagcattgg aagtgattcc caaggtagag caacagctgc taacaacaaa 720
cgtcagctta gtgaaaaccg aaagcccttc aactttttgc ctatgcagat taatactaac 780
aaggagcaaa ggtgcatttt acaagtcccc caaacaggag aaacggttg gttcagcaca 840
gtgttaaagg nttgttttgc tttctgggtt ttaagtaatt gaccnctttg gccanacttt 900
tccgggtgtt ntgaaggagg t 921
```

<210> 224

<211> 1979

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1949)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1953)

<223> n equals a,t,g, or c

<400> 224

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ggcgccgcc aagcgccaga cgcgagctgg gaaaaggagg gcagaggagg cggaggcaga 60
ggcagaggca gagcccggtg ccgagaccaa gcgacagacc ggcggggctg ggcctcgcaa 120
agccggctcg gcgagctctc ccgacacccg agccggggag gaaaagcagc gactcctcgc 180
tcgcatcccc gggagccgca ctccagactg gcccggtagt caggggctca ggagcagatc 240
ccgaggcagg ctttgctcag cctccgacga gggctggccc tttggaaggc gccttcaaca 300
gccggaccag acaggccacc atgaccgaga attccacgtc cgcccctgcg gccaaagccca 360
agcggggcaa ggctccaag aagtccacag accaccccaa gtattcagac atgatcgtgg 420
ctgccatcca ggccgagaag aaccgcgctg gtcctcgcg ccagtccatt cagaagtata 480
tcaagagcca ctacaagggt ggtgagaacg ctgactcgca gatcaagttg tccatcaagc 540
```

```
gcctgggtcac caccggtgtc ctcaagcaga ccaaaggggt gggggcctcg gggtccttcc 600
ggctagccaa gagcgacgaa cccaagaagt cagtggcctt caagaagacc aagaaggaaa 660
tcaagaaggt agccacgcca aagaaggcat ccaagcccaa gaaggctgcc tccaaagccc 720
caaccaagaa acccaaagcc accccgggtca agaaggccaa gaagaagctg gctgccacgc 780
ccaagaaagc caaaaaaccc aagactgtca aagccaagcc ggtcaaggca tccaagccca 840
aaaaggccaa accagtgaia cccaaagcaa agtccagtgc caagagggcc ggcaagaaga 900
agtgacaatg aagtcttttc ttgcggtcac tccctcctgt ctcctatatt ctgtaaataa 960
ttttctcctt ttttctctct tgatgctcac caccaccttt tgcccccttc tgttctgact 1020
ttataagaga caggatttgg attcttcaga aattacagaa taattcattt ttccttaacc 1080
agttgtgcaa ggacagcaac aaccaatcta atgatgagaa tgtacttata ttttgttttg 1140
ctattaacct acttacgggg ttagggattt gcgggggggc ttgtgtgttt tgttggttg 1200
tttgccatga aggtagatgt ggggtggggag aagacacaag gcagtttgtt ctggctagat 1260
gagagggaac ccaggaattg tgaggttagc aggaatatct ttagggtgag tgagttttcc 1320
ttgagttggg caccggttgt gagagtttca gaacctttgg ccagcaggag agaggtggta 1380
gggagcagcc agccggcaaa ggagggaggt ggaaaaaac cgccaccggg ctgacttcca 1440
cctcccagtg gtgagcagtg ggggccccaa cccagtttcc ttctcatttt tgtagtttg 1500
ccctttcggc ctccctatatt tcttagggaa ggggagtggt gtccaagtga cagctggatg 1560
ggagaagcca tagtttctcc cagtgcagct aggatgtagc cattggggga tctttgtggc 1620
ttcagcaaat tctcttgta aaccggagtg aaaacttcag ggggaagggtg gggagtcagc 1680
caagtgcctc agtgtgccct gttgaaactt aggtttttcc acgcaatcga tggattgtgt 1740
cctaggaaga cttttctttt cctctggatt tttgttcctc ctgtacaaga ggtgtctttg 1800
cttggtttgg tggggctgcg gccacttaaa acctcccgat ctctttttga gtcctttttt 1860
taaacaagtg ttacttgtgc cgggaaaatt ttgctgtctt tgtaatttta aaactttaaa 1920
ataaattgga aaagggaraa aaaaaaagna aanaaaaaaa aaaaaaaaaa aaaaaaaaaa 1979
```

<210> 225

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (506)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<400> 225

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tcgacccacg cgtccgcccc cgcgtccggg aaacaggaga tcgtggatcc tccttcaaaa 60
atggaggatg gaaagcccgt ttgggcgcca caccctacag atggatttca gatgggcaat 120
attgtggata ttggccccga cagcttaaca attgaacctt tgaatcagaa aggcaagaca 180
tttttggtc tcataaacca agtgtttcct gcagaagagg acagtaaaaa agatgtggaa 240
gataactgtt cactaatgta tttaaatgaa gccacactgc tccataatat caaagttcga 300
```

tatagtaaag acagaattta tacatatgtc gccaacattc tgwtgtcagt gaatccatac 360
tttgacatac ctaaaatata tcttcagagc ataaagtcac atcaaggaaa atctcttggg 420
acaagaccac ctccaggtct ttgcaattgc tgataagcct ttcgggacct ggaagggtgcc 480
ccaagatgag tcagtctaac catggnatcc nggagaatcc aggggccggg gnaaaccagg 540
a 541

<210> 226

<211> 277

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (135)

<223> n equals a,t,g, or c

<400> 226

tcgacccacg cgtccgtgaa taagcaatct ggcctttgag ggggctgttg cggtagacagac 60
aattctgtgg agcggcttcg gcggctccga ggagaagcaa tatgttaagg atacctctaa 120
gaagggcctt agtangcctt tctaataagt cttccaaagg atgtgttcga acaactgccca 180
cagcagcaag caacttratt gaagtatttg ttgatgggtca rtctgtcatg gtggaaccrg 240
gaackacygt cctccaagct tgtgagaagg ttggcat 277

<210> 227

<211> 2069

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2026)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2042)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2050)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2062)

<223> n equals a,t,g, or c

<400> 227

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gggtcgaccc acgcgtccgg ggcacattag ctagecgtcg ctctactctc tctaacggga 60
aagcagcgga atacaagaga ctgaactgta tctgcctcta tttccaaaag actcacgttc 120
aactttcgct cacacaaagc cgggaaaatt ttattagtcc tttttttaa aaaagttaat 180
ataaaattat agcaaaaaaa aaaaggaacc tgaactttag taacacagct ggaacaatcc 240
gcagcggcgg cggcagcggc gggagaagag gtttaattta gttgattttc tgtggttggt 300
ggttgttcgc tagtctcacg gtgatggaag ctgcacattt tttcgaagg accgagaagc 360
tgctggagggt ttggttctcc cggcagcagc ccgacgcaa ccaaggatct ggggatcttc 420
gcactatccc aagatctgag tgggacatac ttttgaagga tgtgcaatgt tcaatcataa 480
gtgtgacaaa aactgacaag caggaagctt atgtactcag tgagagtagc atgtttgtct 540
ccaagagacg tttcattttg aagacatgtg gtaccaccct cttgctgaaa gcaactgggtc 600
ccctgttgaa gcttgctagg gattacagtg ggtttgactc aattcaaagc ttcttttatt 660
ctcgtaaaga tttcatgaag cttctcacc aagggtaccc acaccggaat ttccaggaag 720
aaatagagtt tcttaatgca attttccaa atggagcagc atattgtatg ggacgtatga 780
attctgactg ttggtactta tatactctgg atttccaga gagtcgggta atcagtcagc 840
cagatcaaac cttggaaatt ctgatgagt agcttgacc agcagttatg gaccagttct 900
acatgaaaga tgggtgttact gcaaaggatg tcaactcgtga gagtggatt cgtgacctga 960
taccaggttc tgtcattgat gccacaatgt tcaatccttg tgggtattcg atgaatggaa 1020
tgaaatcgga tggaacttat tggactattc acatcactcc agaaccagaa ttttcttatg 1080
ttagctttga aacaaactta agtcagacct cctatgatga cctgatcagg aaagttgtag 1140
aagtcttcaa gccaggaaaa tttgtgacca ccttgtttgt taatcagagt tctaaatgtc 1200
gcacagtgtc tgcttcgccc cagaagattg aagggtttta gcgtcttgat tgccagagt 1260
ctatgttcaa tgattacaat tttgtttta ccagttttgc taagaagcag caacaacagc 1320
agagttgatt aagaaaaatg aagaaaaaac gcaaaaagag aacacatgta gaagggtggt 1380
gatgctttct agatgtcgat gctgggggca gtgctttcca taaccaccac tgtgtagtgt 1440
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aggagttaga tatcttgcag gaatgctctc ttctgtgttt aggtattctc tgccactctt 1560
gctgtgaaat tgaagtgcag gtagaaaaaa ctttttacta tatgaaactt tacaacactt 1620
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ctgttctatt aaattgctgc cagaatttta catccagtta cctccacttt ctagaacata 1800
ttctttacta atgttattga aaccaatttc tacttcatac tgatgttttt ggaaacagca 1860
attaaagttt ttcttccatg agttgagtc ttaagaaaat gattccagtt actcattttg 1920
catatttgct attttaacat tattggaccc tgcatttata gtcccttgat ttcttccctc 1980
tccctggtgt ctccccaag accccaaata aagcaatata ctgttnaaca aaaaaaaaaa 2040
anggggggcn gccctagggg nnccaagct 2069
```

<210> 228

<211> 471

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (287)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (372)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (418)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<400> 228

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ttccagtcag cggctgcagg gtcgggctcg cgccgtcctc tccccgcccg cgccgkattc 60
taatgtagga actggtgaga agaaggtagac tgaagcctgg atttctgagg atgaaaactc 120
acataggacg acgtcagaca gactcacggt gatggagctc ccctctcccg agtctgagga 180
agtccacgag ccagattag gggagctctt gggaaatcca gaaggtcaga gcctggggag 240
ttccccctct caggacaggg gctgcaacag gtgacagtga cccattngaa gatccagaca 300
ggagagacag ctcaagtgtg caccaagtca ggaagaaacc atattctgaa atcagacttc 360
ttctggcttc anagagagct ccttagaagg ggggaagccat tccttgcat atcctgtngg 420
gaaaccttca cgtttaattc ggacctaaat aaggcatcgg antttcgcac c 471
```

<210> 229

<211> 1640

<212> DNA

<213> Homo sapiens

<400> 229

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tcgacccacg cgtccgatgg cgactttggt cgaactgccg gactcgggtc tgctcgagat 60
cttctcttac ctcccggttc tgtmaccgct ggaagaggct ggtggacgac cggaggctgt 120
ggcgacatgt cgacctgacg ctctacacga tggcgacctt aagtcattgt gcacctcctt 180
cgaagggtaca tggcatcccc gctccattcc ctgcggatgg gtggctacct gttctctggc 240
tcccaggccc ccagttgtc ccctgctctg ttgagagccc tgggccagaa gtgccccaac 300
ctgaagcgcc tctgcctgca cgtggccgac ctgagcatgg tgcccatcac cagcctgccc 360
agcaccttga ggaccttga gctgcacagc tgcgagatct ccatggcctg gctccacaag 420
cagcaggacc ccaccgtgct gcccctgctt gaatgcatcg tgctggaccg cgtccccgcc 480
ttccgtgacg agcacctgca gggcctgacg cgcttccggg ccttgcgctc gctggtgctg 540
ggtggtacct accgtgtgac cgagacaggg ctggatgctg gcctgcagga gctcagctat 600
ctgcagaggg ttgagggtgct gggctgcacc ctgtctgccg acagaccctt gctggccatc 660
agccgccacc ttccgagatg tgcgcaagat ccggctgacc gtgagggcct ctctgcccct 720
ggcctggctg tgctggaggg aatgccggcc ctggagagtc tgtgcctgca ggggtccctc 780
gtcacccccag aaatgccctc cccactgaa atcctctcct cctgcctcac tatgccccaa 840
ctcagagtcc ttgagctgca ggggctgggg tgggagggtc aggaggcgga gaagatcctg 900
tgtaaggggc tgccccactg tatggtcatc gtcagggtct gccccaaaga gtctatggac 960
tgggtgatgt aactactcca cctgcccttg ggacctatcc cagttttcat cattgagccc 1020
cagacctctt gagcagcacc ttgaagaggg cagataatca gacttgagga aactgaaagc 1080
cccaggttga gagaacagag gcctagggac ctccagacca ttggaatcac tgtttgccag 1140
ctgtgtggcc ttggtcatat catcagcctc tgggaagcct agttcccaca tctggaaata 1200
aggatgatca tagctacctc acggttacat tgcaaagcct tactctaaaa gctcccagcc 1260
tccagaggct ctcaatgaag agtcaccttc atggtcgtct tcaggaacag gacggatgaa 1320
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gaaggggtgg ggttaagact caggggcacc tgaggggtctg agccccctta tgagtaccca 1380
agaaggactg tctatgcatg cacaccacaca agcctataca ccattttatat acctacacgc 1440
acgcaagaga cgcggagaga taggcgatgc agactcgcga ttcaatgatc gatatgctca 1500
taaaagtgtc caattatatt ttctgtatgt tgtatgctgt attttccaag acgtatatta 1560
ttttactatt aaagaaaaaa atcatttttt tttcccgaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa 1640

<210> 230

<211> 1970

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1952)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1963)

<223> n equals a,t,g, or c

<400> 230

cngncccagag cccagagcgc cggcgggccc actcccggcc gccccctttct ttctcctcgc 60
cggcccagaga gcaggaacac gataacgaag gaggcccaac ttcattcaat aaggagcctg 120
acggatttat cccagacggt agaacaaaag gaagaatatt gatggatttt aaaccagagt 180
ttttaagag cttgagaata cggggaaatt aatttgttct cctacacaca tagataggg 240
aaggttgttt ctgatgcagc tgagaaaaat gcagaccgtc aaaaaggagc aggcgtctct 300
tgatgccagt agcaatgtgg acaagatgat ggtccttaac tctgctttaa cggaagtgtc 360
agaagactcc acaacagggt aggagctgct tctcagtga ggaagtgtgg ggaagaacaa 420
atcttctgca tgctcggagga aacgggaatt cattcctgat gaaaagaaag atgctatgta 480
ttgggaaaaa aggcggaaaa ataatgaagc tgccaaaaga tctcgtgaga agcgtcgact 540
gaatgacctg gtttttagaga acaaactaat tgcaactggga gaagaaaacg ccactttaaa 600
agctgagctg ctttcactaa aattaaagt ttggtttaatt agctccacag catatgctca 660
agagattcag aaactcagta attctacagc tgtgtacttt caagattacc agacttccaa 720
atccaatgtg agttcatttg tggacgagca cgaaccctcg atggtgtcaa gtagttgtat 780
ttctgtcatt aaacactctc caciaagctc gctgtccgat gtttcagaag tgctctcagt 840
agaacacacg caggagagct ctgtgcaggg aagctgcaga agtcctgaaa acaagttcca 900
gattatcaag caagagccga tgggaattaga gagctacaca agggagccaa gagatgaccg 960
aggctcttac acagcgtcca tctatcaaaa ctatatgggg aattctttct ctgggtactc 1020
acactctccc ccactactgc aagtcaaccg atcctccagc aactccccga gaacgtcgg 1080

```
aactgatgat ggtgtggtag gaaagtcac tgatggagaa gacgagcaac aggtccccc 1140
gggccccac cttctccag ttgaactcaa gcatgtgcat gcaactgtgg ttaaagttcc 1200
agaagtgaat tcctctgsct tgscacacaa gctccggrtc aaagccaaag ccatgsagat 1260
caaagtagaa gcctttgata atgaatttga ggccacgcaa aaactttcct cacctattga 1320
catgacatct aaaagacatt tcgaactcga aaagcatagt gcccgaagta tggtagattc 1380
ttctcttact ctttctcag tgcaagtgc taacattcaa gattggtctc tcaaatcgga 1440
gcaactggcat caaaaagaac tgagtggcaa aactcagaat agtttcaaaa ctggagttgt 1500
tgaaatgaaa gacagtggct acaaagtttc tgaccagag aacttgatt tgaagcaggg 1560
gatagcaaac ttatctgcag aggttggtct actcaagaga cttatagcca cacaaccaat 1620
ctctgcttca gactctgggt aaattactac tgagtaagag ctgggcattt agaaagatgt 1680
catttgcaat agagcagtc attttgatt atgctgaatt ttcactggac ctgtgatgtc 1740
atttcactgt gatgtgcaca tgtgtctgt ttggtgtctt tttgtgcaca gattatgatg 1800
aagattagat tgtgttatca ctctgcctgt gtatagtcag atagtccatg cgaaggctgt 1860
atatattgaa cattattttt gttgttctat tataaagtgt gtaagttacc agtttcaata 1920
aaggattggt gacaaacaca gaactcctgc tncattgcat tgnnttgatg 1970
```

<210> 231

<211> 310

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (262)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (298)

<223> n equals a,t,g, or c

<400> 231

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gcgagactcc gtctcaaac aaaacaaata aaaaaaacaa acagtatttt ttaggaattc 60
atattatttt aaattttgta aggaggagtt acaaaaagac aaatactaca tatgattcca 120
cttgctacac ctagagtcaa attcatggag acagaaagta gaaagggtgg taccagcggc 180
tggaagaggag agaagtgtga gtttaatggg tatagaattt tagttttgta aggtgaaatg 240
agttctggag attggttgca cnaacagtgt gaatatctc aacactactg aactgtanac 300
ttaaattgat 310
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<210> 232

<211> 2833

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1399)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2828)

<223> n equals a,t,g, or c

<400> 232

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ggcagaggcc agggccaagg ccgaggcggc agggctgcga gaggcggcgg cacgacgacg 60
gtccctcagc ccagccacca tgagcaccaa gcagatcact tgcaggtatt ttatgcatgg 120
tgtgtgtcgg gaaggaagtc agtgcctatt ctcacatgac ttggcaaaca gcaaaccgtc 180
caccatctgc aagtactacc agaagggcta ctgtgcctat ggaactcggg gcagatatga 240
ccacacgagg ccctctgctg cagctggagg tgctgtgggc accatggccc acagtgtgcc 300
ctccccagct ttccacagtc ctcaccctcc ttccgagggtc actgcatcca ttgtgaaaac 360
taactcacat gaacccggaa agcgtgaaaa gagaacattg gttcttagag accgaaatct 420
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tattaaaata acataattga gggaccatca gataactgta ttttgtcagg tgcaataaaa 2760
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2833

<210> 233

<211> 692

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<400> 233

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aatgtgacac acttgacaga acagtattgg ctgacggtt tgagagattg gtggaactgg 180
tcacaatgat gggatgatcaa ggagaactcc ctatagcgat ggctctggcc aatgtgggtc 240
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cagactctct tccgaggcaa cagcttggcc agtaaaataa tgacattctg tttcaaggta 420
tatgggtgcta cctatctaca aaaactcctg grtcctttat tacgaattgt gatcacatcc 480
tctgattggc aacatgttag ctttgaagtg gatcctacca gkttagaacc atcagagagc 540
cttgaggaaa accagcggaa cctccttcag atgactgaaa agttcttcca tgccatcatc 600
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acttaccact ccctactgaa taaagctaca gt 692
```

<210> 234

<211> 1353

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1020)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1255)

<223> n equals a,t,g, or c

<400> 234

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ggcacgagcc gatagctgct tcgggattgg cgtccgggcg gctatctagg ggctgctggg 60
aagatggcgg actcgggtggc tagccgatga ggaggccgcg gggggaaccc ggcccccg 120
ccccgagacc gactgagggg gcgacctgcg caggggcccg ggagtcattg tctccatcac 180
ccaactccat gcttcgagtc ctgctctctg ctcagacctc ccctgctcgg ctgtctggcc 240
```

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tgctgctgat ccctccagta cagccctgct gtttggggcc cagcaaattg ggggaccggc 300
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cgaagagccc tggggagctg ctgcgctggc tgggccagaa cccagcaag gtgcgcgccc 420
accactactc ggtggcgctt cgtcgtctgg gccagctctt ggggtctcgg ccacggcccc 480
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aggcagcaag ttgccatttt cccagctttc atc 1353
```

<210> 235

<211> 346

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (151)

<223> n equals a,t,g, or c

<400> 235

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ggctgttttg gagacttatg gtcaccctga agtactgcct gcctctagtg tcgcgtccct 120
ccagtatccg atgggagcgc cgtccgcagg naatgtgtct ctctgatcat ggtgcctcgt 180
gtccagctct ggggaagacc gagacgaaat cgagtcagct ggcgttggga gagggttat 240
ttccgcttcc gcttgccac tttcaggaat ttgattctga gagcagggtc gcggttccag 300
gcaggggttg tacacatatt tgcgttggaa gaaaaaaaag aaccta 346
```

<210> 236

<211> 2271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<400> 236

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acagtgatgg aaagactcac ctggacaaac cctactgtgc cccccagaaa gaatgcttcg 120
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gggggattgt gggagccaaa agtccctacg ttgatgacat gggagcaata ggtgatgagg 180
tgatcacatt aaacatgatt aaaagcgccc ctgtgggtcc tgtggctgga gggatcatgg 240
gatgcatcat ggtcttggtc ctggcgggtg atgcctaccg ccaccagatt catcgccgga 300
gccatcagca tatgtctcct cttgctgccc aagaaatgtc agtgcgtatg tccaacctgg 360
agaatgacag agatgaaagg gacgacgaca gccacgaaga cagaggcatc atcagcaaca 420
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gttccaccac taccgggtcac accaccctac acttcatcat agccaccact tacaggcggc 720
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aaagtaaaact atatatgtgc tatcaggaaa ccccttcata ctgtgtataa aattgcaatc 2220
tagtgaaata aactgtatgc aatggaaaaa aaaaaaaaaa aaaaaactcg a 2271
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<210> 237

<211> 3050

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3024)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3031)

<223> n equals a,t,g, or c

<400> 237

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ttatagtaaa gtagtagcaa aattatTTTT aaaagacttt cttcctttta ctacccattt 180
cctctcttgg gaaagctgat gagcaaatta tccaagactc atttctttat taggcaaagt 240
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<210> 238

<211> 2802

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1800)

<223> n equals a,t,g, or c

<400> 238

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<210> 239

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 239

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cgtcgccgtt tctcctttct tgggcagtat ttttcccagc gccacgcgga ggctgggcca 180
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ccgtataaat gcaaggaaatg tggaaaagcc ttcagtgcgc actcttccct tgttactcat 1380
aagagaacac acagtggaga gaaaccctat acatgccatg cctgtgggaa ggccctttaat 1440
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<210> 240

<211> 1334

<212> DNA

<213> Homo sapiens

<400> 240

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aagaagatcg agaagcggaa cctcaaattg cggcasggaa cctaaagttt cagggggcct 180
caaactctgac cctatcggaa actcaaaatg gagatgtatc tgaagaaaca atgggaagta 240
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aaaacaaagg gaaatctgaa gaagaaagtg ccgagactac taaagaaaca gaaaataatg 540
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ttgaagamct ggcaaggatt tctctgaaaa aggagccatt ggtatgttgg cgttgatgat 1260
gataaagcga atgcmacagt gggatggtct kgaacagggg atatgtttgt ttggtccctt 1320
ctgaaaaaga gggt 1334

<210> 241

<211> 2438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (879)

<223> n equals a,t,g, or c

<400> 241

ggtgcagttc caacagtaac agcgaaaatc atcgggtgat gcaagtactc aaacagatgc 60
cctgaaactg ncacctcca accttcaagg cttttgaaga acaaagcttt attatgcaaa 120

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cccatcacac agactaaagc cacctcttgc aaaccacata cccaaaacaa agaatgccag 180
acagaagaca ctccaagtca gccagatta ttgkggkgcc agttccgtac cagkgttkgt 240
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tgcctgkccc tatgcttatt ccatcttcaa tggatagtga agataaagtc acagagagta 360
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cagaaatgat tgcagaagat gaagagaaga agactctatc tcagggagag tcccaactt 480
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aaggggaaac tgaacggacc tggaagcaga ttttccatca gactcctttg acccacttaa 720
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agagctaaga gtgacatcaa atgaggactg tgggacccag atttgaagac ccaataaaaa 2400
tactcaactt tttaaaaaaa aaaaaaaaaa aaaaaaat 2438

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<210> 242

<211> 139

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (137)

<223> n equals a,t,g, or c

<400> 242

aagaccggag cttgtccgga agattkcaaa tactgcccgc aaagctcgcg ctacaaaacc 60
gggttggar cagwccggtg atggaagttg aacaggtgct ggagtcggcg cgcaaagcaa 120
tagggactag ggatcgcgcg 139

<210> 243

<211> 479

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<400> 243

gctcgtgccg aattcggcac gaggcagttt ttgaaagttt gaaattaagt aaaaattaaa 60
agtcacaaaa gattttgcat gtcaagattc tagccttttt cttctggtgt actgagaggc 120
cagaggagcc cattctaggg actaagtatt gacagaattt ggttctgtgg caagaattac 180
ctggtgtcct agcactaagg accagtaggt cagagccctt gacttagatt tcaggacaag 240
aaacagaaaag attggaatag gattgraatg gagtctcccc gtgattttta aaaacactta 300
statggggcc asgcgcrcrk tggctcaacg cctgtaatcc cagcactttg ggaggccaag 360
atgggtggat catgaggtca ggagatcgag accgtcctgg ctaacatggt gaaaccccg 420
ctctactaaa aatataaaaa aattaaccg gccgtggtgg cngggcgcct gtagtccca 479

<210> 244

<211> 584

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<400> 244

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tgcccaccgc catctccagc tggtgccaa gacagagattg ctttaagtgg caaatcacct 120
ttattagcag ctacttttgc ttactgggac aatattcttg gtcctagagt aaggcacatt 180
tggtgctcaa agacagaaca ggtacttctc agtgatggag aaataacttt tcttgccaac 240
cacactctaa atggagaaat ccttcgaaat gcagagagtg gtgctataga tgtaaagttt 300
tttgtcttgt ctgaaaagg agtgattatt gtttcattaa tctttgatgg aaactggaat 360
ggggatcgca gcacatatgg actatcaatt atacttccac agacagaact tagtttctac 420
ctcccacttc atagagtgtg tggatgata ttaacacata taatccggaa aggaagaata 480
tggatgcata aggaaagacm agaaatgtcc agaagattat cttagaaggc acagagagaa 540
tggaagatca ggtcagagta ttattccaat gcttactgga gnng 584

<210> 245
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c

<400> 245
ggcacagcgt tcacccgaca gtgttcacag ggcccatggg acagagcacg gagcaggggc 60
ccccagggtg tgcgcttgcc agggccacat cttgagcctt cgctctgctc cttcgagagc 120
cgctgctgcc ccaccccaat cccaaccag ccacccctc ctgcctccct gccatctgtc 180
cctttcatcc tccttgccgt gccaagcgcc tgccatggca ccgcctgtta cctanccag 240
ctacaaatgc cagccttgaa tctgccctgg antcccttcc tctaccangt aaacagcctt 300
aactcagccc tgccactccc tgctctgaag ct 332

<210> 246
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c

<400> 246
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gcattttgtg ttggetggag ctggagtaac aagatggcgt cgtccgcgga gtgacagggg 120
tcctctgagg ccggagccgg cggcagtggg ggcagcggta tcgccgccct agctcaccgc 180
gccccttttc cagcccgga cgtcgccgcy caagnaggca gcggcgcccg ccgagaaaca 240
agtggcccag cctggttaacc gccgagaagc ccttcacaaa ctgcggcctg gcaaaaagaa 300
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ctggtacgga agatcgggtc tggctccttc ggggacatct atttgccgat caacatcacc 600
aacggcgagg aagtggcagt gaagctagaa tctcagaagg ccaggcatcc ccagttgctg 660
tacgagagca agctctataa gattcttcaa ggtgggggtg gcacccccca catacggtgg 720

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tatggtcagg aaaaagacta caatgtacta gtcattggatc ttctgggacc tagcctcgaa 780
gacctcttca atttctgttc aagaagggtc acaatgaaaa ctgtacttat gttagctgac 840
cagatgatca gtagaattga atatgtgcat acaaagaatt ttatacacag agacattaaa 900
ccagataact tcctaattggg tattgggcgt cactgtaata agttattcct tattgatttt 960
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agtcgccgag atgacatgga atcattagga tatgttttga tgtattttta tagaaccagc 1140
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aagaagatgt ccacgcctgt tgaagtttta tgtaaggggt ttctgcaga atttgcgatg 1260
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ggcccaaacc cccacaggca agcaaactga cmaaaccaag agtaacatga aaggttagta 1500
rccaagaacc aagtgcgtt acagggaaaa aattgaatmc aaaattgggt aattcatttc 1560
taacagkgtt agatcaagga ggkggtttta aaatacataa aaatttggct ctgcgtt 1617

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<210> 247

<211> 1449

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1447)

<223> n equals a,t,g, or c

<400> 247

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gagaacgcga gtcccaggat ccccggcacc casttctctt ccactgcatt ccccggcgc 120
gtgtgggacc gaggtggaca tggatccgca gaggtcccc ctattggaag taaaggggaa 180
catagaactg aagagacctc tgattaaggc cccttccag ctgcctctct caggaagcag 240
actcaagagg aggcctgacc agatggaaga tggcctggag cctgagaaga aacggacaag 300
aggcctgggt gcaasgacca aaattaccac atcccaccca agagttccat ccctcactac 360
agtgccacag acacaaggcc agaccacagc taaaaagtt tccaagaaga caggaccccg 420
gtgttcacac gctattgccA cagggttgaa gaaccagaag ccagttcctg ctgttcctgt 480
ccagaagtct ggcacatcag gtgttcctcc catggcagga ggaagaAAC ccagcaaacg 540
tccagcctgg gacttaaagg gtcagttatg tgacctaaat gcagaactaa aacggtgccg 600
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tgaccgggta ttcccaccag gaagtggaca ggatgaagtg tttgaagaga ttgcatgct 1320
tgtccagtca gccctggatg gctatccakt atgcatcttt gcctatggcc agacargcag 1380
tggcaagacc ttcacaatgg agggtagggc gggggagacc ccarttgga gggctgatcc 1440

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ctcgggncc

1449

<210> 248

<211> 1484

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1478)

<223> n equals a,t,g, or c

<400> 248

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ccacgcgtcc gcggacgctg gacggacgcg tgggtcnggt taggaggagc taggctgcc 60
tcgggccggt gcagatacgg gggtgctctt ttgctcataa gaggggcttc gctggcagtc 120
tgaacggcaa gcttgagcaa cgcggtaaaa atattgcttc ggtgggtgac gcggtacagc 180
tgcccaaggg cggttcgtaac gggaatgccg aagcgtggga aaaaggagc ggtggcgaa 240
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acctcaccga gtggcaaacc tgccacactc aagatctgct cttggaatgt ggatgggctt 420
cgagcctgga ttaagaagaa aggattagat tgggtaaagg aagaagcccc agatatactg 480
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gtttgaatta tccacatgaa aataaagagc catagtttca aaaaaaaaaa aaaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanngg gggg 1484
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<210> 249

<211> 2422

<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2354)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2408)
<223> n equals a,t,g, or c

<400> 249

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ggtcttgaat aaactactat accaggaggg acatttttctc gctcaagcat cttacattga 60
ccttcttttaa aacaaaaata cgtacaaggc ccacgcgtcc gcggacgcgt ggggagtcct 120
tctaattcttc cttttctaca gacccatctg acctctccct tcttccccag gctgctcctt 180
gccaggccga gctaggtccc aattcttcct cagcctctgc tcttccaccc tataatcttt 240
ttatcacctc cctcctcac acctgstccg gcttacagtt tcrttccgtg actagccctc 300
cccsacctgc ccagcaattt actcttaaaa aggtggctgg agctaaaggc atagtcaagg 360
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tcccgacatt aaataaaaact ccaaaaatta rawtcyggcc ctcaaaccctt acaacaggay 600
ttaattaacc tcrcttcaaa ggtgtacaat aatagaaaaa agttgcaatt ccttgccctc 660
actgtgagac aaaccccagc cacatctcca gcacacaaga acttccaaac gcctgaacyg 720
cagcrgccag gcgttcctcc agaacctcct cccacaggag cttgctacac gtgccggaaa 780
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acccackcca cattaccttc ttttcaaggg cctgtttccc ttgcctccat aactgtttgtg 1140
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caatactctt ttaagcactc ctttttagtt atccccatct gccagttcc cttattaggc 1260
tgagacactt taactaaatt atctgcttcc ctgactattc ctggactaca gctgtatctc 1320
attgccaccc ttcttcccaa tccaaagcct cctttgygtc ctctcttgt atacccccac 1380
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cacgctttta aaagattaaa gcctgttatc attcgcctgt tacagcatgg ccttttaaac 1560
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ccaaacccat atactctcct atcctcaata cctccctcta ctaccatta ttctgttctg 1740
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ttcacttaga ctgaccctga caccattag gctcaacaaa ttacctgggc tgcactgcca 1860
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ccttaggcac tctctaata gaatrctctag gtcctcccaa ttcttagacc ttttataacct 2160
gtttttctcc ttctgttatt ccatttagtt tctcaattca tccaaaaccg tatccaggcc 2220
```

atcaccaatc attctatayg acaaatgttt cttctwacat cccacaata tcacccctta 2280
ccacaagacc tcccttcagc ttaatctctc ccaactctagg ttcccasgct gccccctaate 2340
ccgcttgaag cagncctgag aaacatcggc cattctctct ccataccaac ccccaaaatt 2400
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<210> 250

<211> 574

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (558)

<223> n equals a,t,g, or c

<400> 250

ttttatgnca aaaaacgcaa cccacgcatg aaaaatgngc caantctttc cttggaatgg 60
tctgtatttg ggtgaantcc atccagacgt caattaacac ttcctttatt ttgggggttg 120
ccaactcggt tccccaggat ttaaagacta taacgatgat aaaagtcagt ttcgcaccct 180
gtcaaaggct tggcccggtg ccttttctct cccggcaata ctcggttcaa ttaggtcttg 240
tcccctcatt atctgtgagg actgaattcc acccccgctt ttcaacgcag gctctttgct 300
cgggaaaagt caaaccatct ctcaaaggat caaagagctc agccatagac agagccgccg 360
gaggaaaagc gagtcgctgc atcagatgaa agggggccct cagcctcact cctcaccgca 420
gctcctggga tcttaaagac agggtcagga ggatcaggag ggacaagagg gatggaggcg 480
aaaggctgga tccttaatcc aggccggaga caaagccgcg ccaggagagct cgcggcgcg 540
ggcccctgtc ctccggcncg agatgaatcc tgcg 574

<210> 251

<211> 1044

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (1010)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1011)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1012)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1013)
<223> n equals a,t,g, or c

<400> 251
ggcgggctgg ctacagtaaag cggaggcagc gggggaagat ggcggcggcc gttccacagc 60
gggcggtggac cgtggagcag ctgcgcagtg agcagctgcc caagaaggac attatcaagt 120
ttctgcagga acacggttca gattcgtttc ttgcagaaca taaattatta ggaaacatta 180
aaaatgtggc caagacagct aacaaggacc acttggttac agcctataac catctttttg 240
aaactaagcg ttttaagggt actgaaagta taagtaaagt gtctgagcaa gtaaaaaatg 300
tgaagcttaa tgaagataaa cccaaagaaa ccaagtctga agagaccctg gatgagggtc 360
caccaaaata tactaaatct gttctgaaaa agggagataa aaccaacttt cccaaaaagg 420
gagatgttgt tctactgctgg tatacaggaa cactacaaga tgggactggt tttgatacta 480
atattcaaac aagtgc aaaag aagaagaaaa atgccaaaggc ttttaagtttt aaggtcggag 540
taggcaaaagt tatcagagga tgggatgaag ctctcttgac tatgagtaaa ggagaaaagg 600
ctcgactgga gattgaacca gaatgggctt acggaaagaa aggacagcct gatgccaaaa 660
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caactagtta gaacttgta ctattgtaaa ggaagagtca actggaaaat tcaaggagtt 840
aataaaatgt gtttacttgg tcccagcttt tgagagataa atcccttatg aatccctggt 900
ctaaaatact ttcttacagc tgtgtaaaaat actgggtcaag gagaactttt tcctttttacc 960
tcatgttgta aacttaagtg gctcaataaa aattgatcca ctgtcttgan nnnaaaaaaa 1020
aaaaaaaaaa aaaaaaaaaa aaaa 1044

<210> 252
<211> 1029
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (835)
<223> n equals a,t,g, or c

<400> 252

```
ggcacgagcg gccactgcct gccgcgwgcg gagccggagc ccgagcctga gtggcgccgg 60
gcccgaacgtg gggctccttg gccgcggcgg cgggcggggc atgctccaga ggcctgacca 120
gccatggagg ccgaggcagg cggcctggag gagctgacgg acgaggagat ggcggcgcta 180
ggcaaggaag agctagtgcg gcgcctgcgg cgggaggagg cggcgcgccct ggcggcactg 240
gtgcagcgcg gccgcctcat gcaggaggtg aatcggcagc tgcagggcca cctgggagag 300
atccgcgagc tcaagcagct caaccggcgt ctgcaggcag agaaccgtga gctgcgcgac 360
ctctgctgct tcctggactc ggagcgccag cgcggggcgg gcgcgcgacg ccagtggcag 420
ctcttcggga cccaagcatc ccgggccgtg cgcgaggacc tgggcggctg ttggcagaag 480
ctggccgagc tggaggggccg ccaggaggag ctgctgcggg agaacctagc gcttaaggag 540
ctctgcctgg cgctgggcga agaattgggg ccccgcgggc gcccagcgcg cgcggggga 600
tcaggagccg gcccagcacc cgagcttgcc ttgccccgtg gcgggccccg cgacctaggc 660
gatggaagct ccagcactgg cagcgtgggc agtccggatc agttgcccct ggcctgttcc 720
cccgatgatt gaaggcactg cttcctccac gccgacgccc gcccgattg ctccccgagc 780
cccgggaccg ctgtggacct cgggacctgg acgccgtcct gstgcgcagg agggncgcgt 840
ggcatggact aagaaatcct gacaccaaga agggccctc gctcttgctg gcagggcagc 900
agggggactg aaggctggag cggaggggact tgctgggggt tggattgggg gtaataaacc 960
cggacggaag cggaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggrcg gccgctcgcg 1020
atctagaac                                     1029
```

<210> 253

<211> 475

<212> DNA

<213> Homo sapiens

<400> 253

```
ggcacagcca ggtgctcctg acggacttaa gtgccaaaaa ctgactccat gctaggaacc 60
actgagttct caaccagtga gtttatgatt cctattttta aaataacctt taaagtctga 120
ttataaaaagt agtacatagt ctttgtggaa aattttattaa gtacagtaag tgcagaagaa 180
gaaataaatc actcataatc ccagcagaca gaattaatca ctgtcatttt aggtgtattt 240
ttttgcagag taaaacatgt aaacatttta catagacata aatacaaaca tgataagcat 300
tggacatgga aaatgggcag taaattctgt acatgtgcct tcttgtattt ttgttgtatt 360
tttawatcat gcytttttgc aaaatacatt ataaattaaa catggaattt cactagtttt 420
ctgtggtatt cattttccat gggctggaat aatggtccgg tccactatat ggggt 475
```

<210> 254

<211> 1724

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (440)

<223> n equals a,t,g, or c

<400> 254

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ggcacagtac agcaagaggg caaggacaat tgcttaagtt gacctctggg tccggaatcg 60
cgggcaaaga tggcgggcgg cagggtgttg aggcctttgc tacgcggtcc gaggctttca 120
ttgcacaccg cggctaattg cggcgccacg gctacagaaa cgacctgcca agacgtcgcg 180
gcgacccccg tcgcgcggta ccccgcgatt gtggcctcca tgacagccga cagcaaagct 240
gcacggctgc ggcggatcga gcgctggcag gcgacggtgc acgctgcgga gtcggtagac 300
```

gagaagctgc gaatcctcac caagatgcag tttatgaagt acatgggttta cccgcagacc 360
ttcgcgctga atgccgaccg ctggtaccag tacttcacca agaccgtgtt cctgtcgggt 420
ctgccgccgc ccccgagcga cccgagcccg agcccgaacc cgaacctgaa cctgcgctgg 480
acctcgcggc gctgcgtgcg gtcgcctgcg actgcctgct gcaggagcac ttctacctgc 540
ggcgcarcgg cgcgtgcacc gttacgagga gaggcaggctc atatccttgc ccttcctgga 600
tcagctggtg tcaaccctcg tgggcctcct cagcccacac aaccgcggcc tggccgctgc 660
cgccctcgat tatagatgcc cagttcattt ttactgggtg cgtgggtgaag aaattattcc 720
tcgtgggtcat cgaagaggctc gaattgatga cttgcgatac cagatagatg ataaacccaa 780
caaccagatt cgaatatcca agcaactcgc agagtttgtg ccattggatt attctgttcc 840
tatagaaatc cccactataa aatgtaaacc agacaaactt ccattattca aacggcagta 900
tgaaaaccac atatttggtg gctcaaaaac tgcagatcct tgctgttacg gtcacacca 960
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acaagctatg tatcaaggat tctggagtga agcagatgtt actcgacctt ttgtctccca 1140
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actgactaca caagctgatc aaaataaccc tcgtaaaaat atatgttggg gtacacaaaag 1260
taagcctctt tatgaaacaa ttgaggataa tgatgtgaaa ggttttaatg atgatgttct 1320
acttcagata gttcactttc tactgaatag accaaaagaa gaaaaatcac agctgttgga 1380
aaactgaaaa agcatatttg attgagaact gtgggaatat ttaaatttta ctgaaggaac 1440
aataatgatg agatttgtaa ctgtcaacta ttaaatacat tgatttttga gacaaatatt 1500
tcttatgtca acctgttatt agatctctta ctctgctcaa attcatcact gaaagattta 1560
attttagtta ctttttggtg atttaaaaaa aattgcattt gtatattgct aactgataag 1620
acaaattgag ttattgagct attaaatgca cattttaata taaatgcaga aatcccaaat 1680
aaaatgctaa catactgaat tcagtaatta aaagaaccca ctgc 1724

<210> 255

<211> 306

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (195)

<223> n equals a,t,g, or c

<400> 255

ggcagagcgg ctccctcagct ccaggacctt gctagcagct gccctcagga agaagtttct 60
cagcagcagg aaagcgtctc camtctccct gccagcgtgc atccccagct gtscacggm 120
agagcctgga gaccagctac ctgcagcaca gactccagra gccagcctt ctgtcaaagg 180
cccagaacac ctgtnagcat ctgctgcaga atcaagcgac tctttcttca gaagcagtct 240
caactgcagg cctattttta tcagatgcag atagcagaga gtcctaccc acagccaagt 300
cagcag 306

<210> 256

<211> 890

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (862)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<400> 256

```
ggcacgaggc ccggccgccc cctgccctct ccgctggcca cctgctgccg cccgcgccat 60
ggctggcaaa gcacacaggc tgagcgctga ggagaggac cagctgctgc caaacctgag 120
ggctgtgggg tggaatgagc tggaaggccg tgatgccatc ttcaagcagt ttcatttcaa 180
agacttcaac agggcctttg ggttcatgac aagagtggcc ctgcaggctg agaaactgga 240
ccaccatcct gaatggttta acgtgtacaa caaggccac atcacgctga gcacccatga 300
gtgtgccggc ctttcagaac gggacataaa cctggccagc ttcacgaac aagtagcagt 360
gtccatgaca tagaccctgc ccttcctctt tgaattcttc cgggggaaaag ggtgactgaa 420
ctgggagtc ccggaggagg ctgaggagcc cttaccctcc caccactccc ctcccaagac 480
ccagccgccg ccgttgaggg ctgagtcctt gctgtgggat gtgccagtgt cccaccaaac 540
accaggaatt tagacctttt ccctgcacca ctctcttcat cctgggggct ctgttacact 600
aatttgaata aactctcccc tttctttgca acttcccagc aacaataatg attttcttgc 660
caggccgtct cttgctccct aattcatttc ccaggaagct gtgatacagg gtgaaataaa 720
gtcttgtctt agaaaccagg accctaaacc ccacactatg taatagaaac acatgtgttt 780
ttatgtctca aataaaaacta ttatatcact tggaaaaaaa aaaaaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa anaaaaaaaa aaaaagaaat naaaaaaaaa 890
```

<210> 257

<211> 1159

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<400> 257

```
ggcacgaggc ggaggggaaga gcgggcgggc gggaggcgcc ggcgccagac gcggagggaa 60
ggagctacga gtagccgccg agangccgcg garccagcga cgaccgaccc agccgagccg 120
ccgccgccgc cgcgccccca tggcgggccgc caaggacact catgaggacc atgatacttc 180
cactgagaat acagacgagt ccaaccatga ccctcagttt gagccaatag tttctcttcc 240
tgagcaagaa attaaaacac tggaagaaga tgaagaggaa ctttttaaaa tgcgggcaaa 300
actgttccga tttgcctctg agaacgatct ccagaaatgg aaggagcgag gcactggtga 360
cgtcaagctc ctgaagcaca aggagaaagg ggccatccgc ctctcatgc ggagggacaa 420
gaccctgaag atctgtgccca accactacat cagccgatg atggagctga agcccaacgc 480
aggtagcgac cgtgcctggg tctggaacac ccacgctgac ttcgccgacg agtgccccaa 540
gccagagctg ctggccatcc gcttcctgaa tgctgagaat gcacagaaat tcaaaacaaa 600
gtttgaagaa tgcaggaaag agatcgaaga gagagaaaag aaagcaggat caggcaaaaa 660
tgatcatgcc gaaaaagtgg cggaaaagct agaagctctc tcggtgaagg aggagaccaa 720
ggaggatgct gaggagaagc aataaatcgt cttattttat tttcttttcc tctctttcct 780
ttcctttttt taaaaaatat taccctgccc ctctttttcg gtttggtttt attctttcat 840
ttttacaagg gacgttatat aaagaactga actcaacatt caggttggtt ttttttttgt 900
ttctaagttt ttgccctatt gaagatgact tcagaaaatc cattccccag tcatgaaat 960
```

```
gtactgtgct aacttttctt tccatagtg aaacacttat ttatagtcac caaaaatagt 1020
gaataaaaaa cacatttgga acctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggggggac ggacgcgtgg gcggacgcgt 1140
gggcggacgc gtgggtcga                                     1159
```

<210> 258

<211> 755

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (755)

<223> n equals a,t,g, or c

<400> 258

```
accacgcgt ccggttctag atcgcgagsg ccgccttttt tttttwtta gaagggccag 60
cttactgttg gtggcaaaat tgccaacata agttaataga aagttggcca atttcacccc 120
atcttctgtg gtttgggctc cacattgcaa tgttcaatgc cacgtgctgc tgacaccgac 180
cggagtacta gccagcacia aaggcagggt agcctgaatt gctttctgct ctttacattt 240
cttttaaaat aagcatttag tgctcagtc ctactgagta ctctttctct cccctcctct 300
gaatttaatt ctttcaactt gcaatttgca aggattacac atttcactgt gatgtatatt 360
gtgttgcaaa aaaaaaaaaa gtgtctttgt ttaaaattac ttggtttggt aatccatctt 420
gctttttccc cattggaact agtcattaac ccatctctga actggtagaa aaacatctga 480
agagctagtc tatcagcatc tgacagggtga attggatggt tctcagaacc atttcaccca 540
gacagcctgt ttctatcctg tttaataaat tagtttgggt tctctacatg cataacaaac 600
cctgtcctaa tctgtcacat aaaagtctgt gacttgaagt ttagtcagca cccccaccaa 660
actttatttt tctatgtgtt ttttgcaaca tatgagtgtt ttgaaaataa agtaccatg 720
tctttattag aaaaaaaaaa aaaaaaaaaa aaan                                     755
```

<210> 259

<211> 714

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (665)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 259

```
gtctattagc ttttacctca aaattttaag ccagaactat catctttggt tttttatttt 60
ctatctttaa acatttatct gtgaagtgc aaatggccta cagctgtgag agcaaattga 120
catctcctcc tgaactctga gaagatgtca aaatccacag gcaacttcct cactttgacc 180
caagctattg acaaattttc agcagatgga atgcgtttgg ctctggctga tgctgggtgc 240
actgtagaag atgccaactt tgtggaagcc atggcagatg caggtattct ccgtctgtac 300
```

```

acctgggtag agtggggtgaa agaaatgggt gccactggg acagcctaag aagtggctct 360
gccagcactt tcaatgatag agtttttgcc agtgaattga atgcaggaat tataaaaaca 420
gatcaaaact atgaaaagat gatgtttaa gaagctttga aaacagggtt ttttgagttt 480
caggccgcaa aagataagta ccgtgaattg gctgtggaag ggatgcacag agaacttgtg 540
ttccggttta ttgaagtcca gacacttctc ctgctccat tctgtccaca tttgtgtgag 600
gcacatctgg gacactcctg gggaaaagcct gacttcaatt atggaatgst ttcattgggc 660
tgtgngmagg gtcctgttta atggaagttt ttaattacac tccntcacag tate 714

```

<210> 260

<211> 525

<212> DNA

<213> Homo sapiens

<400> 260

```

ggctttacgg ctgcgagaag acgacagaag ggggtgggtg tcgcgagrga gccggaaaga 60
tggtgggttac cagatctgca cgggctaagg ccagcatcca agccgcgtcg gctgaaagt 120
ccgggcaaaa gagttttgct gctaattgga ttcaagcgca tccagaaagt agtactggat 180
ctgatgcccg aactactgct gaatcacaga cactgggaa gcaaagtta atccctagaa 240
ctcctaaagc tagaaagagg aagagcagaa ctacaggctc actaccaaag gggactgaac 300
catctacgga tggagagacc tctgaggcag agtcaaatta ttctgtgtct gaggaccatg 360
ataccatttt aagggttaact aggagaaggc agatcttaat tgcattgtcc ccagtgtcca 420
gtgttaggaa aaagccgaaa gtaactccaa caaaggagtc ttacactgaa gaaatagtgt 480
ctgaagcaga atctcatgtt tcagggtattt ctaggaattg tgctt 525

```

<210> 261

<211> 3000

<212> DNA

<213> Homo sapiens

<400> 261

```

gaattctcgg gtcgaccac gcgtccgacc cagtggtccg gcttcccccg tgtccccca 60
tccccctccc cgcgcccccc ccgcgtcccc ccagcgcgcc cacctctcgc gccggggccc 120
tcgcgaggcc gcagcctgag gagattccca acctgctgag catccgcaca cccactcagg 180
agttggggcc cagctcccag tttacttggt ttcccttggt cagcctgggg ctctgcccag 240
gccaccacag gcaggggtcg acatggcaga gacactggag ttcaacgacg tctatcagga 300
ggtgaaaggt tccatgaatg atggtcgact gaggttgagc cgtcaggcat catcttcaag 360
aatagcaaga caggcaaagt ggacaacatc caggctgggg agttaacaga aggtatctgg 420
cgccgtgttg ctctgggcca tggacttaaa ctgcttacia agaattggcca tgtctacaag 480
tatgatggct tccgagaatc ggagtttgag aaactctctg atttcttcaa aactcactat 540
cgccttgagc taatggagaa ggacctttgt gtgaagggtc ggaactgggg gacagtgaag 600
tttggtgggc agctgctttc ctttgacatt ggtgaccagc cagtctttga gataccccctc 660
agcaatgtgt cccagtgcac cacaggcaag aatgaggtga cactggaatt ccacaaaaac 720
gatgacgcag aggtgtctct catggagggt cgcttctacg tcccaccac ccaggaggat 780
ggtgtggacc ctgttgaggc ctttgcccag aatgtgttgt caaaggcgga tgtaatccag 840
gccacgggag atgccatctg catcttcccg gagctgcagt gtctgactcc tcgtgggtcgt 900
tatgacattc ggatctaccc cacctttctg cacctgcatg gcaagacctt tgactacaag 960
atccccata ccacagtact gcgtctgttt ttgttaccac acaaggacca gcgccagatg 1020
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```

```

gggcactcag gggcccagtg cattacctgt tcctacaagg caagctcagg actgctctac 1320
ccgctggagc ggggcttcat ctacgtccac aagccacctg tgcacatccg cttcgatgag 1380
atctcctttg tcaactttgc tcgtggtacc actactactc gttcctttga ctttgaaatt 1440
gagaccaagc agggcactca gtataccttc agcagcattg agagggagga gtacgggaaa 1500
ctgtttgatt ttgtcaacgc gaaaaagctc aacatcaaaa accgaggatt gaaagagggc 1560
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gagaggatga aggaggaagg caagatccgg gaggagaatg ccaatgacag cagcgatgac 1680
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gagaagaagc ggaaacagct caaaaaggcc aagatggcca aggaccgcaa gagccgcaag 1860
aagcctgtgg aggtgaagaa gggcaaagac cccaatgccc ccaagaggcc catgtctgca 1920
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<210> 262

<211> 966

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (935)

<223> n equals a,t,g, or c

<400> 262

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caaagcagtg cactgaaaat caatttaagt atttactgga gttgtcttga aggcccaatg 60
ggaaatgtca gtaagggcac atgagaaaac actttaagaa cctattcttc caaagatctt 120
tccagtatct tatgacaaca cagtaaatta taccactcc aaatgcaaaa gctgaaacta 180
ctctgctttc tcacttamct acacttttga ctttcgaaat acatttctct cttcgatat 240
gagctgcaaa ctcccttatat aaaggctcca actctgcagc cctaattatt ctagttggcc 300
caagaaaaat cctaattggt ttatctaagg agacggaatt ttccaatact gtagaggcat 360
gtgtgtgtgt ttgctttaag gaagctgttt tggtataaaa aagtcactgr aggtcataaa 420
ttcatgttaa cacatccagt gtacatgaag taggcaccga gttaaactat ttgtctacta 480
tatagcatgt catcttaaaa gccttatttt ttctcctcaaaa tattaacttt attttctctc 540
ctgtaaaaatc aagacacagt taaaatgtag ccttcctcat tttctgggaa tactttctaa 600

```

```
caagatatgc ttctttccaa ttggacttct aaatttctag caattctaac agtgcataaa 660
agaggcaacc ccaaaagtgt agcaggtract gaataacaga ttgcagcct tgggtatcca 720
cattaaaatt tgaaatctaa gtgaattact tcaagctgat ttcttaggtc aaggagagat 780
tatggtcctt aaatgcctga taaggtcaca tacacaattt caagtgcatt atagtaaatac 840
catgtgwaca gctcctacag ctactaacct gcttctgccc tcacgggtag cgtgcacaat 900
cttcatcgca tgtcctgggt ggggtgggga ggganccagt taaaaaaccc ccctgggggtc 960
atgttc 966
```

<210> 263

<211> 2738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (762)

<223> n equals a,t,g, or c

<400> 263

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ggccggctga gggcacttgc tcttgctgtt tctgcccctg ggtaacatt caagatggta 60
catgctgaag ccttttctcg tccttttgagt cggaatgaag ttgttggttt aattttccgt 120
ttgacaatat ttggtgcagt gacatacttt actatcaaat ggatggtaga tgcaattgat 180
ccaaccagaa agcaaaaagt agaagctcag aaacaggcag aaaaactaat gaagcaaatt 240
ggagtgaana atgtgaagct ctcagaatat gaaatgagta ttgctgctca tctttagtagac 300
cctcttaata tgcattgttac ttggagtgat atagcagggt tagatgatgt cattacggat 360
ctgaaagaca cagtcattct acctatcaaa aagraacatt tgtttgagaa ttccaggctt 420
ctgcagcctc caaaagggtg tcttctctat gggcctccag gctgtggtaa aacgttgatt 480
gccaaaggcca cagccaaaga agcaggctgt cgatttatta accttcagcc ttcgacactg 540
accgataagt ggtatggaga atctcagaaa ttggctgctg ctgtcttctc ccttgccata 600
aagctacaac catccatcat ctttatagat gaaatagact cctttctacg aaaccgttca 660
agttctgacc atgaagctac agccatgatg aaagctcagt ttatgagtct ctgggatgga 720
ttggatactg atcacagctg ccaggtcata gtaatgggag cnrccaatcg tcctcaggac 780
cttgactcgg ctataatgag aagaatgcct acaagatttc atatcaacca gcctgcttta 840
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gacctgctag aagttgcccc ggaaactgat gggttttcag gaagtgcact aaaagagatg 960
tgtcgagatg ctgcccctct ctgtgttaga gaatatgtta attctacatc agaagaaaagc 1020
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atgaagaaat caaaggatgc agcatttcag aatgttttaa cacatgtttg tttagattaa 1140
gagtaaagat catttgtaca gttcagtgat ctagtttggt gtgtcctctt atcagttagt 1200
ggaaatagaa cggaaagagt gctcttttaa caatgaggga gctcagtgtt tatggtttta 1260
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tcagccatat attgtacagc cttatagaat ctaagctggg cttaaagtca taaatgattc 1440
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tgcgtttgtg tgtgtgcgtg tatgtatgtg tatattaaat gtatatatcc acacatttta 1560
tattgacatt ctgtagatat gtttgaatat agaaactttt tttaccccaa ctactgaatc 1620
caggagtacc aaataatata tagtaaaact aagatttaag gttgtgtcaa aaaggtacag 1680
tgattcagcc atttccattt gtcatttggt tcaacctttt ttaagttgag tgtttttatt 1740
tctgcagtta ttagttggat cctccacatc ttgcataat acatgggctc aattattatg 1800
tttgtcagga taatcaaatg aaaatactag ttcagtgatc agcattgaat ggttggttagg 1860
cagccatgtg ctcaacactg atttcacctc ttgagtataa acttttttaa tttaaattgg 1920
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```
tttacatgaa agtggattaa aaggcctttc aaaagaatgg gtttgaaaaa cytcagtacc 1980
ctttaataca tgtacatttc tttccttttt tcattttaatg taacatgtct gttgtaacta 2040
tgtttcttaa atattatttt aaggttatgt gttcctttaat tatggtcaaa tataatttgg 2100
tcaccaaaaa tgaaataata gtttaaaaca agtagctgtt actaagtgtg ctaaaaatac 2160
tcattttata attaatTTTT gttttcttag tatattatta taaattgtgc cctaagtcag 2220
gtacaaatgt acacatcaaa atgcccatac tgtatctatc tgtagtcgtt taatgtgaat 2280
tatatgtgaa tttttttcaa aattttacta accagaattc tggtataggc acctaaccac 2340
gcagcatgag gaaaacggca caacacaatc ttgagggtgcc ttctgaatca tcagattaaa 2400
ttatgcttca tatgtttttg cttttactgt atttctttta aaactctaaa tctttattca 2460
tgtgtcactg gattaattta tctgataatg tgtctcacia gaatctgtta gatcgtttat 2520
tcttcagttg tactttgaat ggtggggtgg aagtttcagg tgaacaatgg ataacaaaaa 2580
gcaagtattg gaagattgtg aagaggatgg aaaaactgaa tacaagatac caaaaatgaa 2640
aaaaagtgtc ccatTTTTta taactatatt ctattatttt ataaatgtgt aataaagggg 2700
tccctcttta aaaaaaaaaa aaaaaaaaaa aaaaaaaa 2738
```

<210> 264

<211> 1520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 264

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tcgntccatc ataangcncc atgtgcggaa ttcgctttac ggctgcgaga agacgrcaga 60
agsgggcggt cgtgtagctg agcagscctg gggcttggtt ctatgtccct gtggctatgt 120
ttccagtgtc ctctgggtgt ttccaagagc aacaagaaac gaataaatct ctgacccttc 180
tcaggtgcag ccagagagac actagcccac tgatggaygg acagacgtgg gcagggtccg 240
tgtcactaaa ccaccacca ctgccacagc tgcctacaac agacacatca gatgacactc 300
cgggcaaata aatgattttc actgaggact tactggtttt aataataggt cctgggtgtg 360
agaagtccct caacctattg tgcaatgagt tttgagaagc gggtaagctg tatgttttgt 420
ggttytgttt cataaatkca tctacaggaa gaccaatatt gactgaatga agctttcatt 480
taaagagcta aaatatgctt tgtgttttta tatgtggata ctactttaaa cctaacgact 540
attcattgta tcatagcttg tgatgtatc tgctcayggc ttttaaggta aattgtgcc 600
tgatccactg ccattctaata tgctttaaca agtcattacc acactactgt tacatcttaa 660
ttatgcatac agacaggtag acttrtttta catatgtgaa ctaactagtt gtcaaagcaa 720
atgcagattg tattctgcaa gtaaagtctt tttctctctg aaatttctag ggatgttctt 780
taagtgaat tcatattmaa actgaagatt ttagttacaa gaactgagtg cagattaaag 840
tcttttgtga ttcaaacata gtcaagagta caactgtgat atttcatgga agttatgcaa 900
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```

taaaatgtct ctaacctgcg aamaaatctr tcaagcagac gkcacagtac tgaatttgaa 960
accagaaata ctgggttttt atataaatgc ttcataagatt tgttttatga taaagggcac 1020
ataactctcc taaacctcac accacctctt gaataggtat aataagtcca catcaatgct 1080
gatgccttag ctattattaa actcttacag tatgatgtaa agtgaaagta caatgtaaga 1140
tcattcctag gccaaactttg accagtttta tacagaaaca tgtgccaaact tttctgtttg 1200
caaggataat atcaaagcaa acaccagaaa gttatatctt tgatgcattt tttcaaaatc 1260
atacacataa tacacaaacc aaagacaaat gatgaatatt aygtcagaaa atataaagtc 1320
ttcccctttc ttcttttgcc aagaaagtcc aatattttca ccatttttat gcacacaatc 1380
aactttatct aagctggaag ttaatgtctc attgttttca ttgttctaaa taaacacctt 1440
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aaaaaaaaaa aaaaaaaagg                                     1520

```

<210> 265

<211> 1568

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1318)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1320)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1469)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1482)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1502)

<223> n equals a,t,g, or c

<400> 265

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ctgctggact agctactgcc agttgtccta tcaactgtctc ttctgtagtt gctgccagtc 120
agcaactgtg tgtcactaat acccggaactc cttcatcagt cagaaagcag ttgtttgcct 180
gtgtgcctaa gacaagtcct ccagcaacag tgatttcttc tgtgacaagc acttgtagtt 240
ccctgccttc tgtctcctct gcacctatca ctagcgggca agctcccacc acatttctac 300
ctgcaagtac ttctcaagca cagctttctt cacaaaagat ggagtctttc tctgctgtgc 360
caccaccaa agagaaagtg tccacacagg accagcccat ggcaaaccta tgtaccccat 420
cttcaactgc aaacagttgc agtagctctg ccagcaacac cccgggagct ccagaaactc 480

```

```
accatccag tagtcccact cctacttcca gtaacacaca agaggaggca cagccatcca 540
gtgtgtctga tttaagtcct atgtcaatgc cttttgcatc taactcagaa cctgctccat 600
tgactttgac atcaccacaga atgggtgctg ctgataatca ggacaccagt aatttacctc 660
agttagctgt accagcacct cgagtttctc atcgaatgca gcccagaggt tctttttact 720
ccatgggtacc aaatgcaact attcaccagg atccccagtc tatttttgtt acgaatccag 780
ttactttaac accacctcaa ggcccaccag ctgcagtgc gtttcttcag ctgtgaacat 840
tatgaatggt tctcagatgc acataaaccc agcaaataag tctttgccac ctacatttgg 900
cccagccaca cttttcaatc acttcagcag tctttttgat agtagtcagg tgccagctaa 960
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ctcaaaggca cctggcttca gaccaccttc ccagcgagtt tctactagtc cagttggggt 1140
accatccatt gacccatcag gcagctcccc atcttctctc tctgtcctc tggcaagttt 1200
ttccggcata ccaggaacaa gggttttcct gcaagggccca gctcctggtg ggactcctag 1260
tttcaacaga caacattttt ctccccatcc ttggacaagc gcctcaaact catgtgantn 1320
tcctattcca tstgtttctt cgggatcatc ttcamctctt tcagccaytt cttgccccac 1380
caacgttggg gccaaccaaa agggagtcag tgccagtcaa ggattcggaa aggttacctt 1440
cccccaattg ggaacagga ggaggactng ggcccgaatt tngggcaagg gaggggggtt 1500
tntttggcac aaggccccgg gggggaacca gtttttttgt tcggtttccc tttgggacaa 1560
agtgggga 1568
```

<210> 266

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (540)

<223> n equals a,t,g, or c

<400> 266

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agtaagtcgc tgattttgtt tctttttttc aaacagtttt gatttgaagt tcctttaag 60
gctgttgag cttttgcaaa taccagcta atgaaaggca ctaagattg ggccatctg 120
catcatcaca ttgaagtttt ctgtctaaag gaaggttcca gctacctgtt acccttttgc 180
taaacacagt tgcagtgttg cagtgtattt catgacaaaa gtgcactcta gttttctgtg 240
aaatgattat tttctctgaa atgattcttg gtcattgtga gcttctaaat gttaaagaga 300
```

acatagtgt tttgacctgt gggaaatctc atcttgnta ccatgggtgt gcacagacca 360
tcaggaagaa ctgaaaagtt caggcaactt gagnaataa aagtcaccac cmgcaaggar 420
gctgtctaaa ataaccggra gattattamc ccagcacgtg gragartgtg ctagtgggta 480
gatgttwtgg aargctacta ggggtccncc cttaggtgcc tgtgctagtc ctaagggggg 540
ggtgg 545

<210> 267
<211> 762
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (712)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (740)
<223> n equals a,t,g, or c

<400> 267
aatcggcac agggaatggc ggggtctcct gagttgggtg tccttgaccc tccatgggac 60
aaggagctcg cggctggcac agagagccag gccttgggtc ccgccactcc ccgagaagac 120
tttcgggtgc gctgcactgc gaagcgggct gtgaccgaaa tgctacaact gtgcggccgc 180
ttcgtgcaaa agctcgggga cgctctgccg gaggagattc gggagcccgc tctgcgagat 240
gcgcagtgga cttttgaatc agctgtgcaa gagaatatca gcattaatgg gcaagcatgg 300
caggaagctt cagataattg ttttatggat tctgacatca aagtacttga agatcagttt 360
gatgaaatca tagtagatat agccacaaaa cgtaagcagt atcccagaaa gatcctggaa 420
tgtgtcatca aaaccataaa agcaaaaacaa gaaattctga agcagtacca ccctgttgta 480
catccactgg acctaaaata tgaccctgat ccagtccttg cctgcattaa ttgaacaagg 540
agagggattt tcccaagttc tcaggatgca acctgggtat caccttcaga ggattcacca 600
agaagtcttt ttcagttgtc ataaggaaac cagatgctwa acctgagact ttatwacaca 660
gattgaaacc acaccaacag aaactggttt caggaaaaac cttttacgtg gnacttgaaa 720
aagaaagcaa acttaaagan ttggcccca aaagaaaaat gg 762

<210> 268
<211> 1433
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (893)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (947)
<223> n equals a,t,g, or c

<400> 268

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gcggaggcct ccgtagtgat ctggccttta ctttctcccc gagtcacggg aagccctcgt 60
tgacctcaca ggggtggacac ccggaggcga gatcccgttc cgcggagcag agccctttct 120
catggaacag gacgtgtcgg ggccgctgct ggggaaagca gccgggcccc cagatgctgg 180
agcgggagca ggccccgggc ccccgagac cctccgcggc accgcccgt cttgtgcctt 240
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ctgcagcagc gtctcctgag agagaaggag gccaaagatca ggaaggcctt ggacaggcct 360
cgcaagaaga ggcacctgct ccgcccggcag cggacgaggc gggagttccc cgtgatctcc 420
gtgggtgggt acaccaactg cggaaagacc acgctgatca aggcactgac gggcgatgcc 480
gccatccagc cacgggacca gctgtttgcc acgctggacg tcacggccca cgcgggcacg 540
ctgccctcac gcatgaccgt cctgtacgtg gacaccatcg gcttctctc ccagctgccg 600
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ttgcacgtga gggacgtcag ccaccccgag gcggagctcc agaaatgcag cgttctgtcc 720
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cgccacaga ggcctgcggg gtgggggcat cgctgcctgg ggagctgagg cgttaccgct 1140
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tctcgtccc agccatttgc tgggatgacc gtgcaggccg gtgacacggc cgcacctgcc 1260
ccaaagcggg ccgcccagac gtccactcca agcctgagca tccacacaat tccagtgggc 1320
cctcgtgtcc tgctgtgaac tgctttccct cggaatgttt ccgtaacagg acattaaacc 1380
tttwtttta cttccgtgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggg 1433
```

<210> 269

<211> 2278

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (205)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (335)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2277)

<223> n equals a,t,g, or c

<400> 269

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cacagtatgg aaatacgggg aagcaggaga tagatccgga aaaataaagt tgagaccaga 60
ctgtagactg tcttgaatgc caagctaaag tgtttatact ttattcagta aataaacaaa 120
actggtagcg caagaaaagg agtgagcaag tggtaacaac ttaaagacaa ttcattttgc 180
tcccacgtgt tatatcatga atttnttggg cccaaagtca tatatagaat tttttaata 240
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```
attgatactt gattaaagaa agcacaaaga cataaaaaata aaacattctt ggtgggggga 300
aatgggtttt aagaggcatt ttattaatth taccncaggt atatttgccc tgtgttttac 360
aaacaaaaar gaggtatgtg ggttacatgt atgaaacact ggatcagaag gaccagtat 420
ttgatgcaaa aggaatagaa acagtcagaa gagattcctg ccctgctgtt tctaagatac 480
ttgagcgttc tctaaagctg ctatttgaaa cgagagatat aagtctaatt aaacagtatg 540
ttcagcgaca atgtatgaag cttctggaag gaaaggccag catacaagac tttatctttg 600
ccaaggaata cagaggaagt ttttcttata aaccaggagc ttgtgtgcca gcccttgaac 660
ttacaaggaa aatgctgact tatgaccggc gctctgagcc tcagggttggg gagcgagtgc 720
catagtcatt catthtatggg acccccggag taccacttat ccagcttgta aggcgcccag 780
tggaagtcct gcaggaccca actctgagac tgaatgctac ttactatatt accaagcaaa 840
tccttcacc cttggcaaga atcttctcac ttattggtat tgatgtcttc agctggtatc 900
atgaattacc aaggatccat aaagctacca gctcctcgcg aagtgaacct gaaggcgga 960
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<210> 270

<211> 2533

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1280)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2514)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2531)

<223> n equals a,t,g, or c

<400> 270

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<210> 271

<211> 1618

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1612)

<223> n equals a,t,g, or c

<400> 271

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<210> 272

<211> 470

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (429)
<223> n equals a,t,g, or c

<400> 272
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<210> 273
<211> 983
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (879)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (915)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (930)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (967)
<223> n equals a,t,g, or c

<400> 273
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tcggatgtga tccgccttat tatgcagtac ttgaaggaga acagtttaca tcgggcgtta 180
gcaccttgca ggaggagact actgtgtctc tgaatactgt ggacagcatt gagagttttg 240

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<210> 274

<211> 2006

<212> DNA

<213> Homo sapiens

<400> 274

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<210> 275

<211> 1376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1368)

<223> n equals a,t,g, or c

<400> 275

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<210> 276

<211> 2594

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2198)

<223> n equals a,t,g, or c

<400> 276

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catcgaaaag tctctagcgt catatttttc tcacccaaat tacgtttcca cgagattatt 2460
tatatatagt tggctctatc ctgcagtcct tgaaggtgaa gttgtgtgtt actaggctgt 2520
gttttgggat gtcagcagtg gcctgaagtg agttgtgcaa taaatgttaa gttgaaacct 2580
caaaaaaaaa aaaa 2594
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<210> 277

<211> 679

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (653)

<223> n equals a,t,g, or c

<400> 277

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gggcagcagc cagcacatcc tctcctccct gcgctttgtc ttttgcttcc cgcattggcg 180
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tcagccgtgc ggcgytcctg ctgcgcgcc tctgargccg tcaagtccgc cgccawcccc 600
tactggctgt tgctcangcc ccagcactca aagtmataaa agccgacttc aancccatgc 660
ccaaaccgtg gaacaaaaa 679
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<210> 278

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 278

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gccacaggca cgcacgccc ggtggaggac gggaggctca tggagcagct gctgagcagc 540
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agcggccccg cctacgcatt cacagccctg gatgccctgg ctgatggggg tgtgaagatg 660
ggacttccaa ggcgcctggc agtcgcctc ggggccagg ccctcctggg ggctgccaag 720
atgctgctgc actcagaaca gcaccaggc cagctcaagg acaacgtcag ctctcctggt 780
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```

ggggccacca tccatgcctt gcatgtgctg gagagtgggg gcttccgctc cctgctcatc 840
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tgagggcctt caactgatta gacaaggccc gccacatct tggagggcat ctgccttact 1440
gattaaaatg tcaatgtaat ctaaaaaaaa aaacaaaa 1478

```

<210> 279

<211> 2321

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<400> 279

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ggcacaggtc cgagcgccgc catggctctg ctgtccgagg gcctggacga gstgcccgcc 60
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tggtcttga ggactggtgg cggcgccccc cgaagccttc gcggccttcc tgcgagcga 180
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gccgggagar garggcgcgg cggcgccggc ggcgccagg actcgttcgg ctctcgcac 300
gactgctctt cgggcactac ttccccgagc agtcggacct ggagccamcg ctgttggagc 360
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tccagccccg cggcgctggc gaaggctggc cctacggctg caaggacgct ctgngccaca 480
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aggagaggag atgccagggc tgagtgtgag tgagggtggga acacaaacca gcatcaccac 1260
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ttggtccaga tcgaccacta ctcagactga catggatgag aacattctct ttcctcgagg 1380
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aaaataaaac tactttctgt ttatctcttt agaaaaaaa a 2321

```

<210> 280

<211> 1693

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (200)

<223> n equals a,t,g, or c

<400> 280

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gtatttcccg ttccccatct agtaactccc atctcagccc acgtatctcc ctgagtggaa 120
atctcggggc ccagaccagt cgattgggag gtccgcccct cccttcagcg acttggtctg 180
tgttttggca gttgccgcgn acaacagtca cttccgggaa ggggctctgc gaatctcctt 240
ccgtcgggtc gctcagaatc agctgtcctc tcagactgtg tgggtgggtt ccccgccgc 300
agctccgtac gggcttggat tgctgggcct cgggtgcacc cagcctcccc cactcgggtt 360
ctgagcttga gctggcggct ctttaactct gcttcactgt tgctcttggc aacatccact 420
tccgggagcg agtgccggtt cccccgctca ccgcgggcta gggagcgtgg gattccggac 480
tgtgagcggc tgtagtgctg tcgcagctgc tggcgatccg gcgaccctcg gccggcagga 540
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gttctgctgc acgtgaagcg gggcgacgag agccagttcc tgctgcaggc gcctgggagt 660
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gatcccatcc gcatggagtt tgaaaataag gaagacttgt cgggaacaca ggcagggtc 1140
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aagaagcttt cagactacgt ggggaagaat gaaaaacca aaattatcgc caagattcag 1260
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ctgatgctgt actatcacag aagacaagag gagctcaaga gattggaaga aaatgatgat 1380
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ccctctgtaa aagatgttaa catttctagt tttcttttag tgtgaathtt taaaatagca 1620
gttattcaag gttttagaac ttaataaata cctagtcaga aaaaaatgtg taaatcgttt 1680
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<210> 281

<211> 258

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<400> 281

ggcagagcca ggactcagta atccctgggg ggcaggctct gnagccctcg gccacacgtg 60
gctnccggca cccatgggtcc cagtgccttg gaatggagac ggccagttct ggggccagat 120
gtggtgctct ggaatccagt cccatttcc tctggccac gagctgtccc agcggcctct 180
tcagccgcat tcagccccta cttacctggg gaccccggt ggggcacgag aagcaccagg 240
ggggtaggg cccaaagg 258

<210> 282

<211> 1764

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1764)

<223> n equals a,t,g, or c

<400> 282

gctgtgtcct ggagctttat ttggggagtt tyayccagaa tgggtgggaga aacctcccag 60
gtgccaggta ccccgcatcg tgacccttca cttggtgtct taggaagtca agctgagggg 120
tgctgagtc tccctgctg gcccctgcag ccccgccct gcttttcatc cccacccct 180
gcaaacatgg aggagcccc tccttctcac ctgggtctcc tagcccctga catggagaas 240
cctgagacaa gccacagaac ccctcttttc taaaatggag acaataattt cctacctccc 300
aagggagcag agaggcctcg tggcacgtcc gtggccaggg agcccactgt cctggctggc 360
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cttcctttct cccggctgtc agaactgggt ctcttgattt tgcccctaca ttatgcctct 480
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tgagtgtatt tgcagccagg gagctgcagg gtggatttga ggggccatac cctctgagca 720
cttaaaaaag gtatttgctc caggccaggc agcaggctgt ggacaccctt gccaccactg 780
gggactgcca ctgaggactc cccgagcacg ttgttccccg tcttctccaa ggtgttgagg 840
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aaaaraaaag aaaaatataa tkgtttgatt tttgagattw aaacaaacma aaagagaggc 1740
attttcmaaa tttcagaact ttcn 1764

<210> 283

<211> 799

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (750)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (760)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<400> 283

aattcggcac gagtgcagagg ccgagtccgt cactggaagc cgagaggaga ggacagctgg 60
ttgtgggaga gttccccgc ctgagactcc tggttttttc caggagacac actgagctga 120
gactcacttt tctcttcttg aatttgaacc accgtttcca tcgtctcgta gtccgacgcc 180
tggggcgatg gatccgttta cggagaaact gctggagcga acccgtgcca ggcgagagaa 240
tcttcagaga aaaatggctg agaggccac agcagctcca aggtctatga ctcatgctaa 300
gcgagctaga cagccacttt cagaagcaag taaccagcag cccctctctg gtggtgaaga 360
gaaatcttgt acaaaaccat cgccatcaaa aaaacgctgt tctgacaaca ctgaagtaga 420
agtttctaac ttggaaaata aacaaccagt tgagtcgaca tctgcaaaat cttgttctcc 480
aagtcctgtg tctcctcagg tgcagccaca agcagcagat accatcagtg attctgttgc 540

tgtcccgcca tcaactgctgg gcataaggag agggctgaac tcaagattgg aagcaactgc 600
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tgatgatatg acagatgaca ttcctgaaag ctactcttc tcaccaatgc catcagagga 720
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ggccaaaaaa ggggcccg 799

<210> 284

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 284

aggtagactg tggcaatrag gcagctaagt gggtcaccaa cttcttgaaa actgaagcgt 60
atagattggt tcaattttag acaaacatga agggaagaac atcaagaaaa cttctcccca 120
ctcttgatca gaatttccag gtggcctacc cagactactg cccgctcctg atcatgacag 180
atgcctccct ggtagatttg aataccagga tggagaagaa aatgaaaatg gagaatttca 240
ggccaaatat tgtggtgacc ggctgtgatg cttttgagga ggatacctgg gatgaactcc 300
taattggtag tgtagaagtg aaaaaggtaa tggcatgccc cagggtgtatt ttgacaacgg 360
tggaccaga cactggagtc atagacagga aacagccact ggacaccctg aagagctacc 420
gcctgtktga tccttctgag agggaattgt acaagttgtc tccacttttt gggatctatt 480
attcagtggg aaaaatttga agcctgagag ttggtgaccc tgtgtatcgg atggtgtagt 540
gatgagtgat ggatccacta ggtgtatatg gcttcagcaa ccaggaggga ttgactgaga 600
tcttaacaac agcagcaacg atacatcagc aaatccttat tatccagcct tcaactatct 660
ttaccctgga aaacaatctc gatttttgac ttttcaaagt tgtgtatgct ccaggttaat 720
gcaaggaaa g tattagagg gggaatatga agtatatat ataaatttta ggtactgaag 780
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cactgaaata gtatgtggat gaattcacct acttacaatt ttatggtttc tttgtaaata 1440
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<210> 285

<211> 702

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (695)

<223> n equals a,t,g, or c

<400> 285

ggcagaggct cccaaaatgg tgggattaca ggtgtgtggg ccaccgtgcc tggctgattc 60
agcatttttt atcaggcagg accagggtggc acttccacct ccagcctctg gtcctaccaa 120

tggattcatg gagtagcctg gactgtttca tagttttcta aatgtacaaa ttcttatagg 180
ctagacttag attcattaac tcaaattcaa tgcttctatc agactcagtt ttttgtaact 240
aatagatttt tttttccact tttgttctac tccttcccta atagcttttt aaaaaaatct 300
ccccagtaga gaaacatttg gaaaagacag aaaactaaaa aggaagaaaa aagatcccta 360
ttagatacac ttcttaaata caatcacatt aacattttga gctatttcct tccagccttt 420
ttagggcaga ttttggttg tttttacata gttgagattg tactgttcat acagttttat 480
accctttttc atttaacttt ataacttaaa tattgctcta tgtagtata agcttttcac 540
aaacattagt atagtctccc ttttataatt aatgtttgtg ggtatttctt ggcatgcac 600
tttaattcct taccctagcc tttgggcaca attccygtgc ttcaaatga gagtgcggc 660
tgggcatggt gggctcccgc ctgtaaatcc cagtnacttg gg 702

<210> 286

<211> 1175

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1166)

<223> n equals a,t,g, or c

<400> 286

ctaaagggaa caaaagctgg agtccaccg cgggtggcggc cgctctagaa ctagtggatc 60
ccccgggctg caggaatggt actattttcta catgttgtcc atgatgtgac tttcgtaaac 120
cttcaaaatt atttgggcat agtgctctat gtttaataaa ggtttttata gatgtttat 180
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cccctctggc ttcgaccaa caaagttcat taacctggga tgaatggggg tggcctgttg 300
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aacaacactt gacaggctgt tgcacagggc ttctatagat cagtgtgtta ggaatgggag 420
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aaaattgcag atttagggag cctgccatt taacagtctc atcagggtgat tcttttcaac 660
agtaatgttt gagaattact ggggttaaatt gtgggaaagg gtccagattt taaagggtgct 720
ttaagggtgc cctctgccga tactgtttgt ctttctactg tttcatcccc taacttcccc 780
caaccctcaa attaaaacta gaactataga tccacatgaa cgcacgcctg agatttggcc 840
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<210> 287

<211> 2873

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2870)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2871)

<223> n equals a,t,g, or c

<400> 287

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```

<210> 288

<211> 2104

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (497)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1323)

<223> n equals a,t,g, or c

<400> 288

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gtaaggggtg ctgtgcgact gcggccattt gtggatggaa cagcgggagc aagtgatccc 180
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cctggggtga tcccgcgggc tctcatggac ctctgcagc tcacaaggga ggagggtgcc 480
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cacttctctg cagccagtcg aaatcggact gtaggagcca cccggtcaa ccagcgctcc 720
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cgccagcgag agggaaaact ctacctgatt gacttggctg ggtcagagga caaccggcgc 840
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cgctcctga ccgtcgtctc ctcactccgc cttttcaaat ttttgtataa ccccggtgtg 2040
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aaaa 2104
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<210> 289

<211> 1251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1211)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1231)

<223> n equals a,t,g, or c

<400> 289

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aactattggt acggggctag agaggaaggc tttgggattg ccggggagca gcgagcgacc 120
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gacttccggtt tccagttacc aaggcacgag gatccggtgt tccaacccag ggggaaaaat 180
gcggcctttg actgaagagg agaccggtgt catgtttgag aagatagcga aatacattgg 240
ggagaatctt caactgctgg tggaccggcc cgatggcacc tactgtttcc gtctgcacaa 300
cgaccgggtg tactatgtga gtgagaagat tatgaagctg gccgccaata tttccgggga 360
caagctggtg tcgctgggga cctgcttttg aaaattcact aaaaccaca agtttcgggtt 420
gcacgtcaca gctctggatt accttgcacc ttatgccaaag tataaagttt ggataaagcc 480
tggtgcagag cagtccttcc tgtatgggaa ccatgtgttg aaatctggtc tgggtcgaat 540
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<210> 290

<211> 1591

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (768)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1538)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1568)

<223> n equals a,t,g, or c

<400> 290

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ttgtttacat tatgttctag actggccccc tgaatctcca gacaaccaat atcacttaaa 180
taagtgatag tcttaatact agtttttaga ctagtcattg gagaacagat gattgatgtc 240
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```

<210> 291

<211> 2386

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (448)

<223> n equals a,t,g, or c

<400> 291

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ctttggtggc ggccactcag ttttctctgc cagtgtckgg tgattttaca acgagatgct 180
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aaattgacat tccatctgtc tttattgggt aatcatcagc taattctctg aaagatgaat 660
tcacatatga aaaagggggc caccttatct tagttccaga atttagtctt cctttggaat 720

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actacctaata tcccttcctt atcatagtgg gcatctgtct catcttgata gtcattttca 780
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taaggatttt tatatggcct tgtatgaggg gagtttgaat gttaataaac atgttttcca 2340
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<210> 292

<211> 983

<212> DNA

<213> Homo sapiens

<400> 292

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gcttggtggg tcttaggtga tggctgcctt ctttcttcat caccacaccc agcttcttg 180
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ataaattaat aaatgggcta ttaattctg tatawaaatt tacagcaagt acgtacactg 900
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tgagacttga aggtccagtc gac

983

<210> 293

<211> 2655

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2651)

<223> n equals a,t,g, or c

<400> 293

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aaagactggc aatcagaaac catagagtat aaagatgac aggacatgca tgcttttaggg 180
aaaaagcaca ctcatgagaa tgtgaaagaa actgccatcc aaacagaaga ttctgctatt 240
tctgaaagcc cagaagagcc actgccaaac cttaaaccga agcctaacct gagaacagag 300
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gcacataatg aacagaattc ccaaatacca actccaactg atggcccatc attcactgtt 1080
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aatacaatat ctgtgaatgg aaggtcaaga ctgagccatt ccatgtcccc tgatgcccag 1260
gacggccatt aaatgttacc ctgccacacc actgcacttc acttccactt cagaccaact 1320
tcataactaat ggaacatttt ggcaaatgta tattcagatg tacactaata tattatctat 1380

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ctttaaaaca aggtgtaa at gatttttcatt ttttacaat gaaaaataat tcctttgtat 1560
tgatttcact taccagcaca ttctctacaa tgggtgactta gacaaaagta taagattcat 1620
agactttata tttgtatgac atacaactag gacaaacata gatatgacat ttgctgcctc 1680
agtgtagcaa ttggaaatat ttataagtta tatgaaagcc tgttttgggc tgaaagaatg 1740
atttagaaaa ctagtgatac caaataagta tattcagttc aataattatt ttcaatgatg 1800
aatcacttag tgtgaaagac ttgccttggtg tattctttat gtaattacaa atcactgtca 1860
attttatggg aagctcatag tattttaata ttttattaac atggaactct tgttttttta 1920
atcttttagaa cttaaattct acaagaattt taaatatatt ctgtatataa ttatgacatt 1980
gtcacacaga aattacacat tttatgtgcc agaagcctta aacatctttc tgtgaaaatg 2040
ctgatataat gtgacagtta tttcacattt gatatgtaga gaggaatagg ggtagttta 2100
tgtttatatt gaaaaacttt aaagactatt tggaagtcc agaaattctg gttttaattc 2160
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gcgacgtcat agctctctcc ctatagtgag tcgtattata agctagcttg ggatctttgt 2520
gaaggaactt acttctgtgg tgtgacataa ttggacaaac tacctacaga gatttaaagc 2580
tctaaggtaa atatnaaatt tttaagtgt ntaatgtgtt aaactaactg catatgcttg 2640
ntgcttgaaa ntttg 2655
```

<210> 294

<211> 1738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1679)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1693)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1717)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1729)

<223> n equals a,t,g, or c

<400> 294

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actgctgara gatgaccgag tgttgccctct tcgtgccata cggttttttg ttgaraatct 120
caacctgat gcaattgtag ttcgaaagat ggctatctca gctgttgctg gtatccttaa 180
acagctaaaa agaaccacaa aaagctgacc attaacccct gtgaaatcag tggatgccct 240
aaaccacccc aaattattgc tggatgatagg cctgataatc attgggtgca ttatgacagc 300
aaaactatac caagaactaa aaaagaatgg gagtcaagtt gctttgtgga aaaaactcac 360
tggggatact acacctggcc aaagaatatg gttgtttatg ctgggtgga agagcagcct 420
aagcttgga gaagcaggga ggatatgaca gaggcagaac agattatatt tgatcatttt 480
tctgatccta aatttgttga gcagttaatt acttttctat cattagaaga cagaaaagga 540
aaagataagt ttaatccacg acgtttttgy ctctttaagg gtatattcag gaattttgat 600
gatgccttcc tgccagttct gaagcccat ttagaacatt tgggtgcaga ttcacatgaa 660
agcaccagc gatgtgttgc agaaattata gctggtttta tcagagggtc taagcactgg 720
acatttgaag aggtggagaa gctttgggag cttctgtgcc ctctgcttag aacagcactg 780
tccaatatta ccgtagaaac ttataatgac tggggagcct gtatagcaac atcctgtgaa 840
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ccagcaagaa tggagagtgc ctgaactatt gcacagacta ctgaagtact tggaaaccaa 1020
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catgatagat gtatctttgc caaataccac accaaccata tcgcctcatg tccctgagtt 1140
tactgctcga attctggaga aattgaaacc tctcatggat gtggatgaag aaattcagaa 1200
ccatgttatg gaagaaaatg gaattggtga agaagatgag cgaactcagg gcattaaact 1260
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tagctacgat gaactgaaaa gagatgcaaa gttatgttta tcattaatgt ctcagggggtt 1440
gctttaccct catcaagtgc ctttggtact tcaggtgcta aaacaaacag caagaagcag 1500
ttcttggcat gcacgataca cagtactgac ctacctccag accatggtat ttataacct 1560
ctttatttcc taaacaatga agatgcagtt aaaggatatc aggtgggctg ggttataagt 1620
cttttgggag ggacgaacca actgggaggg ttccggagaa atgggctggc ctaacttanc 1680
cttaagccgg gtntggctaa acagtggtaa acttttncct taacccatng ggaccagt 1738
```

<210> 295

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<400> 295

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ccggnccggc attccccggg cgacccacgc ntccgngcg gtggccctgt atttcatcga 60
taagctggca ctgagagcag gaaatgagaa ggaggacggg gaggcggccg acaccgtggg 120
ctgctgttcc ctccgsctgg agcacgtcca gctgcacccg gaggccgatg gctgccaaca 180
cgtggtggaa tttgacttcc tggggaagga ctgcatccgc tactacaaca gagtgccggg 240
ggagaagccg gtgtacaaga acttacagct ctttatggag aacaaggacc cccgggacga 300
cctcttcgac aggttgacca cgaccagcct gaacaagcac ctccaggagc tgatggacgg 360
gctgacggcc aaggtgttcc ggacctaca cgcctccatc actctgcagg agcagctgcg 420
ggccctgacg cgcgccgagg acagcatagc agctaagatc ttatcctaca accgagccaa 480
ccgagtcgtg gccattctct gcaaccatca gcgagcaacc ccagtagctg tcgagaagtc 540
gatgcagaat ctccagacga agatccaggc aaagaaggag cagggtggctg aggccagggc 600
agagctgagg agggcgaggg ctgagcacia agcccaaggg gatggcaagt ccaggagtgt 660
cctggagaag aagaggyggc tcctggagaa gctgcaggag cagctggcgc agctgagtgt 720
gcaggccacg gacaaggagg agaacaagca ggtggccctg ggcacgtcca agctcaacta 780
cctggacccc aggatcagca ttgcctggtg caagcggttc agggtgccag tggagaagat 840
ctacagcaaa acacagcggg agaggttcgc ctgggctctc gccatggcag gagaagactt 900
tgaattctaa cgacgagccg tgttgaaact tcttttgtat gtgtgtgtgt ttttttact 960
attaaagcag tactggggaa tttgtacaa waaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
```

<210> 296

<211> 684

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (675)

<223> n equals a,t,g, or c

<400> 296

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tcgacccacg cgtccgaatt tttttctcag aatagcaata gcttatccaa agaaagctag 60
tgtacatctt ccaaagcttt taaaataaaa aagaggagga gttacacttg cagaatgtat 120
atcttctggg atgcttctcc ctactccact ggacactgtt tgaaagtttg tagtttataa 180
tattcttacc taggctgtgt tggtcagctt agaatatcta agtgatagga taaaactaaa 240
gctgagtggc aaactgccag tctatatact gcatttagtc tataggctgt tttgtttggc 300
ccacaaagca ttttattatt taagtttatg ccaacattta agaatcaaga atttcccaga 360
cattcagatt tctgacttca attgaaaatc tgacagtata aaccctatta tattcctgca 420
tggcataaaa tcttcagttg ctgaatggtg atatccactt ttagaaagag tactctaccc 480
tgttctgcat tcatacaacc taagccaacc cgcccttcac catcccactt ctctttcagg 540
ttatctgctt aggtctggtg gcatttgtgt ttataaacct tgaactcaag ctgctagatg 600
gtcagttgca ttgtgaactg aactatctga atgatttttc attgtaaata tatagctatn 660
ggaccacttt aaatnccctt ttct 684
```

<210> 297

<211> 1838

<212> DNA

<213> Homo sapiens

<400> 297

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ccggcggtggg tccgggcaag aaccgcttgt rgtttggttt aaattctgca cgggaggacc 60
ttctgagttt acctgttggg ctcttggttg cgcaggcaca gcagctacac agaagagatg 120
ggagaagagg ctaatgatga caagaagcca accactaaat ttgaactaga gcgagaaaca 180
gaacttcgct ttgaggtgga ggcatctcag tcagttcagt tggagttggt gactggcatg 240
gcagagatct ttggcacaga gctgacccga aacaagaaat tcacctttga tgctgggtgcc 300
aaggtggctg ttttctacttg gcatggctgt tctgtgcaac tgagcggccg cactgaggtg 360
gcttatgtct ccaaggacac tcctatgttg ctttacctca acactcacac agccttgga 420
cagatgcgga ggcaagcgga aaaggaagaa gagcgaggtc cccgagtgat ggtagtgggc 480
cccactgatg tgggcaagtc tacagtgtgt cgccttctgc tcaactacgc agtgcgtttg 540
ggccgcccgc ccacttatgt ggagctggat gtgggccagg gttctgtgtc catccctggt 600
accatggggg ccctctacat cgagcggcct gcagatgtcg aagagggttt ctctatccag 660
gcccctctgg tgtatcattt tggttccacc actcctggca ctaacatcaa gctttataat 720
aagattacat ctcgtttagc agatgtgttc aaccaaaggt gtgaggtgaa ccgaaggcat 780
ctgtgagtggt ctgtgtcatt aacacctgtg gctgggtcaa gggctctggt taccaggctc 840
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tgtacaatga actgaaacgg gactccccca ctttgtagcg actgtgctgc tccctaaatc 960
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gcaccaccta ctgagtgtta gcactgmcca gggtagagag gagaacctgt ccgagacaag 1260
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ggatctgaag tagagatcag caggaagcct tgctgcctgg gacatagaga tcatctggcc 1440
accctagag gcagatgggc tgagataaaa gactgttggg gccacctgac cagtaaaactg 1500
tggaactagta gaaagtccat attctacctc taaaaacagg tagtggtaac ctgactcttc 1560
taatcttgaa ccaaaaggaa aacctagaga ctgtaattgg tttcttagac cacctaagat 1620
gccactttga attctctaag accctggaga attgcatttc tttcactgtg ctactatgtg 1680
gtttttaaaa aatcaatgct ttatattcca tatgtggttc ttacctattt atctaggatg 1740
aaagtgtgaa ttagagggac tccttccaat aaagttcaaa cttaaaaaaa atcattttaa 1800
taaatatttt tgccatatca taaaaaaaaa aaaaaaaaaa 1838
```

<210> 298

<211> 1635

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1609)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1635)

<223> n equals a,t,g, or c

<400> 298

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tcgcgtcacc acagaggcaa gacaagggtc catatcgcgg catccggctc ccgccgtct 180
tcaggagaga aagaaaaaat aaaatatact tggggaagtt gtacctgcca gaattagcaa 240
gagctttctt taagaagaca tttgtcaaac tcaacaaatt gaaggttaac accttaagag 300
ttgtagttac tgaccagaaa tatggacaga cttcttagac ttggaggagg tatgcctgga 360
ctgggccagg ggccacctac agatgctcct gcagtggaca cagcagaaca agtctatatc 420
tcttccctgg cactgttaaa aatgttaaaa catggccgtg ctggagttcc aatggaagtt 480
atgggtttga tgcttgagga atttgttgat gattataccg tcagagtgat tgatgtgttt 540
gctatgccac agtcaggaac aggtgtcagt gtggaggcag ttgatccagt gttccaagct 600
aaaatgttgg atatgttgaa gcagacagga aggccggaga tggttgttgg ttggtatcac 660
agtcaccctg gctttggttg ttggctttct ggtgtggata tcaacactca gcagagcttt 720
gaagccttgt cggagagagc tgtggcagtg gttgtggatc ccattcagag tgtaaaagga 780
aaggttgtta ttgatgcctt cagattgatc aatgctaata tgatggtctt aggacatgaa 840
ccaagacaaa caacttcgaa tctgggtcac ttaaacaagc catctatcca ggcattaatt 900
catggactaa acagacatta ttactccatt actattaact atcggaaaaa tgaactggaa 960
cagaagatgt tgctaaattt gcataagaag agttggatgg aaggtttgac acttcaggac 1020
tacagtgaac attgtaaaca caatgaatca gtggtaaaag agatgttgga attagccaag 1080
aattacaata aggctgtaga agaagaagat aagatgacac ctgaacagct ggcaataaag 1140
aatgttggca agcaggaccc caaacgtcat ttggaggaa atgtggatgt acttatgacc 1200
tcaaatattg tccagtgttt agcagctatg ttggatactg tcgtatttaa ataaagcaac 1260
gaaaaacgct attaatgatg ccttcagtgt atattcctct gttgttccta atgctcaaaa 1320
tcaagggacc tctgaagggt tacttggcta aatgtaagac atctggcatc atttgcagca 1380
ctgtaacacc ttcagtctca gttgtgcaat tacttctgtt tctttagtca gggcttttgc 1440
agattctaaa gttatacatg aatacatcaa agtggacaaa ttttgtaag atcccattta 1500
atatttgaaa aaatcagtag cacaaatata ttttgattgt cacttacaaa ataaaaatata 1560
tttacagtcw aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaana aaaaaaaaaa 1620
aaaaaaaaaa aaaaan                                     1635
```

<210> 299

<211> 868

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (790)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (857)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (860)

<223> n equals a,t,g, or c

<400> 299

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tgctgctgct gctcttcctc ggagcggccg agtcggtgcg tcgggcccag cctccgcgcc 120
gctacacccc agactggccg agcctggatt ctcgccgct gccggcctgg ttcgacgaag 180
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ggttctgggt gcaactggcag ggcgaggggc ggccgcagta ccagcgcttc atgcgcgaca 300
actaccgcgc cggcttcagc tacgccgact tcggaccgca gttcactgcg cgcttcttcc 360
accgggagag tgggcccagc tcttcaggc cgcgggcgcc aagtatgtag ttttgacgac 420
aaagcatcac gaaggcttca caaactggcc gagtcctgtg tcttggaact ggaactccaa 480
agacgtgggg cctcatcggg atttggttgg tgaattggga acagctctcc ggaagaggaa 540
catccgctat ggactatacc actcactctt agagtgggtt catccactct atctacttga 600
taagaaaaat ggcttcaaaa cacagcattt tgtcagtgc aaaaacaatgc cagagctgta 660
cgacctgtgt aacagctata aacctgatct gatctggtct gatggggagt gggaatgtcc 720
tgatacttac tggaactcca caaattttct ttcattggsty tacaatgaca gccctgkcaa 780
ggtctctgtg gggtcggtga gggcaaggac cctgttttat tcaacctggg aactcagtgt 840
ttgccacatg tgaggcncan gtagttc 868
```

<210> 300

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (526)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (542)

<223> n equals a,t,g, or c

<400> 300

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ccacgacgtc cscggaacgc tsgettgcgg ggccctgagcc tctccgccgg cgcaggctct 60
gctcgcgcca gctcgtctcc gcagccatgc ccaccaccat cgagcgggag ttcgaagagt 120
tggaactca gcgtcgctgg cagccgctgt acttggaat tcgaaatgag tcccatgact 180
atcctcatag agtggccaag tttccagaaa acagaaatcg aaacagatac agagatgtaa 240
gcccatatga tcacagtcgt gttaaactgc aaaatgctga gaatgattat attaatgcca 300
gtttagttga catagaagag gcacaaagga gttacatctt aacacagggt ccacttccta 360
acacatgctg ccatttctgg cttatggttt ggcagcagaa gaccaaagca gttgtcatgc 420
tgaaccgcat tgtggagaaa gaatcgagt gtgaaacaga acaatatctc actttcatta 480
tactacctgg ccagaatttg gaggcccttg aatcaaccag cttcanttct caatttcttg 540
gntaaag 547
```

<210> 301

<211> 865

<212> DNA

<213> Homo sapiens

<400> 301

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ttagtagaga tggggtttca ccacattggc caggctggtc tcaaactcct gacctcaagt 60
```

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gaatccacct accttggcct accgaggtgc tgggaattaca ggtgtgagcc accgcgcctg 120
gcctaatact gctttattac aacgttatct gtgggtcgga atccttttat attgggtaac 180
agatgaccct gactcagaat aatctttttc aatggccttt tgagggaagc ttgtgaagtt 240
ctgggtgaatc ttcttttttca cttcactttc agtgagctga aagtaaccaa actaaatata 300
tgtatttgtt aaagggacag gacaagacag ccttaaaaaa ttgaatatag ttgggtgagac 360
aactcagaag tacaggtttg agcatccctt attcaaaatg cttgagaagt gttttgggtt 420
ctggaatatt tgcattaatg cttgccagtt gagcatccca ggtccgaaa tccacagtgc 480
tccaatgagc ctttcccctg agtgtcacat ctgtattggc actcaaaaag tttcatattt 540
tgagcattt cagatttcag atttgggatg cttcatctat attgacagct gcaagaacag 600
aaaggaagaa gagattattt ttgtgggaga acagtttctc ccatagtgtt tcctgtggaa 660
tgctagtgtc tcataaagtc ttcyaaaaaa aaaaaaaa aatcaaatgt ttggaagcca 720
ttttgtgtta ctgtgtgact ttcttttact caaaaacagc accataaaat ttctgacaag 780
tactataggt aaagaaatcc ctttataactt aacctagtat tttctacctt tccccatcta 840
aaataaaatt tttataccac tttct 865

```

<210> 302

<211> 815

<212> DNA

<213> Homo sapiens

<400> 302

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asaagcataa acataagcac aaacacaagc ataagcatga cagtaaagaa aaggacaagg 60
agcctttcac tttctccagc cctgccagtg gcagtctatt cgttctcctt ccctttcaga 120
ctgagaaggg gacaaaaaga cttttccttt catgtccaga agaatgtatg taactaaagc 180
tttgcctct gtgaagaatt ataaaagggg ggggggaaag gattcgctc tcctacagaa 240
attctgaatt catttaagtt ctaagcattt gatttatgtt atttatacag ttgggatcta 300
attaggaaaa tgtgttttgt agttctggat aaactatttc atccgctgtt tcctcccaa 360
aacacacaca cagagcaaac tccctttcat aaaagccctc atatccactg gcagtccccg 420
ttcgcatcat ggtctccatg tgtaccgcca aagtcaatta tgtttgaaag ctttggtgg 480
atgttatggg gcaaagttat gatttacaca gaagcaactg ccaaatctgt ggtgcaacca 540
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ctacagtact cttccttatt gcaccatttt tgtattaacg tagaaactaa gcatcagaat 660
ttatgaacaa agaatatgtt atttttccyt ttgcyctaaa atactgagga tttggggaaag 720
caattcyttt ttaaaaaaat tttggaataa ctaycttttg rtacacattc gggsggttac 780
ggtgttgggg atttaggcag gactatccaa atccc 815

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<210> 303

<211> 1919

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 303

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actgacagta cggtcggaat tcccgggtcg atccacgcgt ccgcggacgt ggsacaaaaa 60
cagatgctag gaagcttggc ttcctcttct tgttgaccct tttttgaacc aacatctttt 120
ttattatatt cagagtatgt ttttaagtgt atcttaatat atacattttt taggacatct 180
taaatactaaa caaaaaataa aatgaacatc tcttgaaacc tgttaaaaca accagttaaa 240

```

gccacagatg gctttcaggg cagtagcagc agaggccagt ggactctgag gactcctgag 300
gggcgggggc tgtagccagc caggtgcatg ccgggacccat ggcccccata cttggctgct 360
tcctgtgaca gtgaaataca tccttcaagg tggcagctgt tagggctgaa tcttctggag 420
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caaggcagcc tgaacactca gttgcagggc cgggcttgcc gtgggtgacc cagagccacc 540
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agtaataaaa attaacaaat ttctttgttt aacaaaagat taatctttaa accactaaaa 780
tacatagact gattgattat tcaacacatt ggaattgatg tcggtcatag tttcctgaag 840
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aattctgact tatgaaaaaa aaaaaaaaaa agtcgacgcg gccgganatt tagtagtag 1919

<210> 304

<211> 157

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (112)

<223> n equals a,t,g, or c

<400> 304

agggtgtacac cctgcccagc cacaagccga tttttaaaag gtcaaagtgt atgacagcca 60
ttttacagga aaaaaaaaaa ttgtatagtt gtgggtgacgt tcctcacaca gngcaccagc 120
ttcagggagt ctgtcccttg cagacccctg aaccggg 157

<210> 305

<211> 343

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (270)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<400> 305

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aatgcagtg tttcgattac tgatctctca ttacccaact atctgatggc atcttcgggt 60
ggactgcttc ctaccagct tctgaattct tacttgggta ccacctgcg gacaatggaa 120
gatgtcattg cagaacagag tkttagtggg tattttgttt tttgtttaca gattattata 180
agtataggcc tcatgtttta tgtagttcat cgagctcaag tggaattgaa tgcagctatt 240
gtagcttggtg aaatgggaac tggaaatctn ctctgggttaa aaggcaatca nccaaatacc 300
agtgggctct ttcattctac aacaagagga ccctaacatt ttt 343
```

<210> 306

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (661)

<223> n equals a,t,g, or c

<400> 306

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gaagcaggca gggtgctcag ctgcccccg agcggttcct ccacctgagg cagactccac 60
gtcggctggc atgagccggc gccctgcag ctgcgcccta cggccacccc gctgctcctg 120
cagcgccagc cccagcgagc tgacagccgc cgggcgccct cgacctcgg atagttgtaa 180
agaagaaagt tctacccttt ctgtcaaaat gaagtgtgat ttttaattgta accatgttca 240
```

ttccggactt aaactggtaa aacctgatga cattggaaga ctagtttcct acaccctgc 300
atatttggaa gggtcctgta aagactgcat taaagactat gaaaggctgt catgtattgg 360
gtcaccgatt gtgagcccta ggattgtaga acttgaaact gaaagcaagc gcttgcataa 420
caaggaaaat caacatgtgc aacagacact taatagtaca aatgaaatag aagcactaga 480
gaccagtaga ctttatgaag acagtgctat tcctcaattt ctctacaaag tggcctcagt 540
gaccatgaag aangtagcct tctggaggag aaattcgggtg acagnctaca atnctggctg 600
gttacaaatc caaggcccag acccaatatt cccaacaaaa aacttttgnt tggccagggtc 660
nttcaatttt tgaaaaaaag tgggttttgg tttaac 696

<210> 307

<211> 396

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<400> 307

cctaggcctc ccaaaatggt gggattacag gcgtgaggca ccgcacccaa cctaacagag 60
gaaacacttc aaatgcacat cctcacattt ctagtctacg tagctggaaa aaaaggacat 120
tyttaatatg ctaatgtgga ggtcacctag ttaccctaag ggagaaaagc aaggcaagga 180
cccactgcac agcaagttcc cccttggaag ccacgggcg cactgcccac aaatgcacat 240
aatctctgca gaaatacaaa agccctaatt ctggctgcac tggggacaca ggtaggagga 300
aattttcccc tgtaagcagt tttgaattct gaactatgtg gacagamcac caattttaaa 360
acaatgaaag tgagttgggt gggcacatgg tttngc 396

<210> 308

<211> 549

<212> DNA

<213> Homo sapiens

<400> 308

agagacaggg ggcaagaagg ggtgtmaggg ccagtraca aaatcattgg ggtttgtagt 60
cccaacttgc tgctgtcacc accaaactca atcatttttt tcccttgtaa atgccccctcc 120
cccagctgct gccttcatat tgaaggtttt tgagttttgt ttttggctct aatttttctc 180
cccgttccct ttttgtttct tcgttttgtt tttctaccgt ccttgtcata actttgtgtt 240
ggagggaacc tgtttcacta tggcctcctt tgcccaagtt gaaacagggg cccatcatca 300
tgtctgtttc cagaacagtg ccttggtcat ccacatccc cggaccccg cgtgggacccc 360
caagctgtgt cctatgaagg ggtgtggggg gaggtagtga aaaggcggt agttggtgg 420
ggaaccaga aacggacgcc ggtgcttggg ggggttctta aattatatat aaaaaagtaa 480
ctttttgtat aaataaaaga aaatgggacg tgwaaaaaaa aaaaaaaaaa aaaaactcga 540
gactagtcc 549

<210> 309

<211> 1778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (1704)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1744)
<223> n equals a,t,g, or c

<400> 309

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tttgccttat tttttctctt acatgaagta aagcgctttg gtcaaacaca caaaaatact 120
gccttgctact ggtgggttggg ttcattagtg gatcacacac agtggtctac ttggcttgta 180
aaatggtgcc ttggataggg tgagtttgga taagtatgta tgtatgtatg agttatagca 240
aaattaagta gattgaatca agtccatgca aaagcaataa aacagtttta attttttaaat 300
tttttaaaaa ttaaaacttt aataaaacag tttttaattt tttgctaggt tcttttaaaa 360
aatgatgtaa cttacatgga agtcttcaca ggactttttt ctttcctgga actattgaaa 420
tgtaatttag gatgatttga tcttccatct caagtgtgca acatggctgt gtcatctctg 480
cttacatatg ttttatttaa caaaattcta gtcaagggat aagggcataa tgaagacaag 540
cttcagttat gaaagtacaa actatttgty tgattaattt ttaaaaatga cattaagaag 600
cccattgtaa aataatattt gcagtcaaat ggtttttctt gctgtaagtc ctggtgtagc 660
tatgtttagg gtagtggttc tcatctacct tggagtgcac aagacttacc tagcaggctt 720
gtttaaaaag ttcagattcc tagctttgta cccagggtt gcctcagggt gtagggctg 780
tggtcctgga gtcacactt ttataaatag tgggtcagag accacagaga gagactgctt 840
catcgaatgg gaagtaccaa ggagaaagta caattcagta ttgtctggag gcaagtggac 900
actttgtacc tgaggtttag aataggtggt ctcttgccag tacaatcccc aggcgttttc 960
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taaaaataat gaacaagaaa gaagacaaga tcctaattcc tgtcattagt gacctaaagta 1260
ccccatatca gaaactttgc aaaacagatc tagggacaga agggctttga aagacatttt 1320
tctttggggc aaatttcgtg tgccagaact acagttttaa tgtttttatg agcaagggaa 1380
ggtagcattg attcccatag ctttcttaatt agatacatgc tgtcatggat gtaagcctta 1440
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tctgttttac tccaatttgt aagatcattt aatggaataa agatcacac accaaaaaaa 1680
aaaaaaaaag gcgggcccgt ctanaagatc caagcttacg tacgcgttgc atgcgacgtc 1740
atanctcttc tatagtgtca cttaaattcaa ttcactgg 1778
```

<210> 310
<211> 771
<212> DNA
<213> Homo sapiens

<400> 310

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attaatttaa aaagcccccc aatctgtggt attttattat ggcagcccta gcaagcta 60
acagtgggtt gagaggctgg gaggggtgag gggaagataa acttttaaaa agctcttatt 120
tttcatttca atcagttaaa aatacttgct cagtgttaaca attttgcttc tcagcttcca 180
ctctaataatt gttgtgccat taagcaattt agctaattct gacatttctt agattcataa 240
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tgttaggagc atttaatctg tattttacaa gttaggaagc agaggatcag agatgggaaa 300
ggactagccc aaggccaaca ttaacaagcc ctctaacaaa aactttacaa tacatttatg 360
ttgaatggaa ctccaagatc tcacctctcc atccaggaat ggagtccatg taatcaaagt 420
gaacttaaaa ataggacagt ttcaacaagt caggagattc acagcaactg atcaaaggga 480
gtccagtcaa cgtgagcaag cgtgattatg atgaggaagc cccctctgct ttaatccaca 540
caaggaacgt aacctgaagt aacctgatgt taaccaatct gctgtgtcta ctatgctgtt 600
tccttgttcc tgctagtgtc gctttacaaa tgcagaccat tctatcatac ctggcrgggc 660
ttctgtttta tttttagggc tggatgctac ccagttcatg aatcgctaataaaaagccaat 720
tagatcttta taaaaaaaaa aaaaaaaaaat tactgcggcc gacaagggaat 771

<210> 311

<211> 1419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1005)

<223> n equals a,t,g, or c

<400> 311

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tatggagctg cctgttccga ggttgaaata gactgcctga cgggggatca taagaacatc 120
agaacagaca ttgtcatgga tggttgctgc agtataaatc cagccattga cataggccag 180
attgaagggtg catttattca aggcattgga ctttatacaa tagaggaact gaattattct 240
ccccagggca ttctgcacac tcgttggtcca gaccaatata aaatccctgc catctgtgac 300
atgcccacgg agttgcacat tgctttgttg cctcctctc aaaactcaaa tactctttat 360
tcatctaagg gtctgggaga gtcgggggtg ttcttggggt gttccgtgtt tttcgctatc 420
catgacgcag tgagtgcagc acgacaggag agaggcctgc atggaccctt gacccttaat 480
agtccactga ccccgagaa gattaggatg gcctgtgaag acaagttcac aaaaatgatt 540
ccgagagatg aacctggatc ctacgttcct tggaatgtac ccatctgaat caaatgcaaa 600
cttctggaga aaacagagtg cctcttccca gatggcaatc tgtcctatct ctgtgctgga 660
agatgctaga tctgaaagac agagtttcca cagttcagaa atcatcccac agtggtgtt 720
ttctatggag ctgatttaaa gtattccatt tagatttgat agatatgctt aagcaatcta 780
taaatcattt tcaatgttat aaacactaat tggtttcctc tagggtgata ttcgtcatta 840
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ccttctctt gtcagaatga atatagacac tgtatctaag tgggacccaaa gaaaaaatag 1080
cgaactttca ccaaagtttt catgaaaacc caaagcttt aaaagktact atcaagaaat 1140
tgaaaggaaa cccacagaat aggataaaat atttgtaaat catatatattg ataaaagtct 1200

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tgtaaccaga tacataaaga gctcttacia ctcaataaaa ggcaagtaat ttaaaaaatag 1260
gcaaaaagaat tgctggatgg tatggtagtt cttatttttag tttttaccct aactactctg 1320
acttgatcat ttaacattct gtgtatgtaa caaaatatca catgcataaa tattatgtat 1380
caataaaatt ttttaatggg caaaaaaaaaa aaaaaaaaaa 1419

```

<210> 312

<211> 526

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (525)

<223> n equals a,t,g, or c

<400> 312

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gggaagttca aagggaatth ttttattgth tagcttgthh ttaggthgca gtaaatthctc 60
taggtcatcc agcaggatta ggaagagaag cattgtgaga aacaggththh gggththgct 120
gaaatthgct tgctagcatt gcatcactthh tccttaactg ttctctaagt actgatgtct 180
ttcaaattga ctcaagakcat actcctthac tttgagcaga atatththgaa cagaaaawta 240
agccatththc atthtatatac ctaattcaat aggththataa ataaaagggc aaatcctcac 300
gaataatata gtacagtga aaattgctct ccccttagga actgaggaat agaaaaacaa 360
thtctcttha cattgtthtat agtaggtagc ccttgaaaag aaaatcactt atccctgcca 420
cccccatggt cctcataaca agttagggaa actgaaattg ctggaaatthh aggattctwa 480
ggcamcaggc wgggaaatag ggtcctcata cctgacctthh thctnc 526

```

<210> 313

<211> 2435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2408)

<223> n equals a,t,g, or c

<400> 313

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ggcacgagcg cgaangacac ggctgggchg ccgactgcag agccgggagg ctggtggtca 60
tgccggggtt cctggttcgc atcctccttc tgctgctggt tctgctgctt ctgggcccta 120
cgcgcggtt gcgcaatgcc acccagagga tgthtgaaat tgactatagc cgggactcct 180
tcctcaagga tggccagcca thtcgctaca tctcaggaag cattcactac tcccgthgthc 240
cccgtthcta ctggaaggac cggctgctga agatgaagat ggctgggctg aacgccatcc 300
agacgtatgt gccctggaac thtcatgagc cctggccagg acagtaccag thtthctgagg 360
accatgatgt ggaataththh thtcggctgg cthcatgagct gggactgctg gththctthg 420
ggcccgggcc ctacatctgt gcagagtggg aaatgggagg attacctgct tggctgctag 480
agaaagagtc taththththh cgthcctccg acccagatta cctggcagct gthgacaagt 540

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gcttcctgca gaagcgcttt cgccaccatc tgggggatga tgtggttctg tttaccactg 720
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tcatgcccc acccccgcaa aaaaacaaag attcatggct ggaccatgta tgatgatgaa 2100
agcctgtgtc tttgagggat tctaccctga acatacctca cagatccctc ctgtcatgcc 2160
acatttcact gattggaatg tggaaatgga aaaggaatth aggatgtgca ttttcacctg 2220
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gaggggctga cagcacagta acgtgcatac atatctgcag ggctggaatg gaagctttta 2340
agggtgtagt gatttttatt ttggaagaat catgttacct ttttgttaaa taaaatttgt 2400
actcaanaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2435
```

<210> 314

<211> 2543

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2538)

<223> n equals a,t,g, or c

<400> 314

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tctccctccc ttgcctcaga tttattgcta aacatgggtg catttttggg taaacccaaa 120
actgaaaaac ataatgctca tgggtgctggg aatggttttac gttatggcct gagcagcatg 180
caaggatgga gagtggaat ggaagatgca cacacagctg ttgtaggtat tctcacggc 240
ttggaagact ggtcattttt tgcagtttat gatggctcat ctggatccc agtgggcaaat 300
tactgctcaa cacatttatt agaacacatc actactaacg aagactttag ggcagctgga 360
aaatcaggat ctgctcttga gctttcagtg gaaaatgtta agaatggtat cagaactgga 420
```

tttttgaaaa ttgatgaata catgcgtaac ttttcagacc tcagaaacgg gatggacagg 480
agtgggtcaa ctgcagtggg agttatgatt tcacctaaagc atatctactt tatcaactgt 540
ggtgattcac gtgctgttct gtataggaat ggacaagtct gcttttctac ccaggatcac 600
aaaccttgca atccaagggg aaaggagcga atccaaaatg caggaggcag cgtgatgata 660
caacgtgtta atggttcatt agcagtatct cgtgctctgg gggactatga ttacaagtgt 720
gttgatggca agggcccaac agaacaactt gtttctccag agcctgaggt ttatgraatt 780
ttaagagcag aagaggatga atttatcatc ttggcttggt atgggatctg ggatgttatg 840
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aatgtgtgca attgggtagt ggacacttgt ttacacaagg gaagtcgaga taacatgagt 960
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gattgtcaca taaggtaact gaagatttat tagtttaatt ctatttttac agtaaccttg 2340
aattcttctg agttttgcat gtattaaatt caattaatgc tgaacatgaa gagtaaagta 2400
tttatctgaa agaagtttct gggtaggag aagtaatgaa tgtatccatt tgtacatgg 2460
ttacatgttg tggatgcttt gtaaacattt tcctgtatgt ttaaattgtg tttcagcagg 2520
atgtagttgc cttgtgnag gtt 2543

<210> 315

<211> 828

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (828)

<223> n equals a,t,g, or c

<400> 315

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ggctgtgtgt gctgggcctg gctgcggcg aaccgagatg gcagagcagt cggacgaggc 120
cgtgaagtac tacaccctag aggagattca gaagcacaac cacagcaaga gcacctggct 180

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gatcctgcac cacaagggtg acgatttgac caaatttctg gaagagcatc ctggtgggga 240
agaagtttta agggaacaag ctggagggtga cgctactgag aactttgagg atgtcgggca 300
ctctacagat gccagggaaa tgtccaaaac attcatcatt ggggagctcc atccagatga 360
cagaccaaag ttaaacaagc ctccggaaac tcttatcact actattgatt ctagttccag 420
ttggtggacc aactgggtga tccctgccat ctctgcagtg gccgtcgcct tgatgtatcg 480
cctatacatg gcagaggact gaacacctcc tcagaagtca gcgcaggaag agcctgcttt 540
ggacacggga gaaaagaagc cattgctaac tacttcaact gacagaaacc ttcacttgaa 600
aacaatgatt ttaatatatc tctttctttt tcttccgaca ttagaaacaa aacaaaaaga 660
actgtccttt ctgcgctcaa atttttcgag tgtgcctttt tattcatcta ctttattttg 720
atgtttcctt aatgtgtaat ttacttatta taagcatgat cttttaaaaa tatatttggc 780
ttttaagta aaaaaaaaaa aaaaaagggg gccgccctaa agggtcen 828
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<210> 316

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 316

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aaagaagtcc tttcaagtct ctaggactgg actcttctta agcaagtccg gaagcaccct 180
cactatgtgg ctctacctgg cggccttcgt gggcctgtac taccttctgc actggtaccg 240
ggagaggcag gtggtgagcc acctccaaga caagtatgtc tttatcacgg gctgtgactc 300
gggctttggg aacctgctgg ccagacagct ggatgcacga ggcttgarag tgctggctgc 360
gtgtctgacg gagaaggggg ccgagcagct gaggggccag acgtctgaca ggctggagac 420
ggtgaccctg gatgttacca agatggagag catcgctgca gctactcagt ggggtgaagga 480
gcatgtgggg gacagaggac tctggggact ggtgaacaat gcaggcattc ttacaccaat 540
taccttatgt ragtggtga acactgagga ctctatgaat atgctcaaag tgaacctcat 600
tggtgtgac cagggtgacct tgagcatgct tcctttggtg aggagagcac ggggaagaat 660
tgtcaatgtc tccagcattc tggaagagt tgctttcttt gtaggaggct actgtgtctc 720
caagtatgga gtggaagcct tttcagatat tctgaggcgt gagattcaac attttgggggt 780
gaaaatcagc atagttgaac ctggctactt cagaacggga atgacaaaca tgacacagtc 840
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acagcagtat tttgatgccc tttacaatat catgaaggaa gggctgttga attgtagcac 960
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aagaaatatg ttggtgtgtt tgtccttact tgaaatgggt ctgtattatg gtacttttaa 1560
taaatatttg atttttcttt ctcttcaaaa aaaaaaaaaa aaaaaaaaaa 1608
```

<210> 317

<211> 1057

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (958)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (966)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1035)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1053)
<223> n equals a,t,g, or c

<400> 317
ttaaactcaaa ctctaaagtc ttgagtgttt caaagtcagt cgttacctgt ttaaaagcct 60
cagccttttag cttattcctc cttcaataca cgggaccttt ggtaatttg gggcaggaaa 120
actcttaaag taatctctct tgggcagagg ccttattgca ccagaggga aaagtatata 180
cttcatttgc tgttactcca gttatgcctt aaattcattt gcttggtaat cctatcaacg 240
rgcactaact tcttagtata ctttaaacac ttagttgggt aacactgaga ttttgttgct 300
ctttattttt tgctgagatg gagtcagtca gatgttagtc atagctaaca ccgaatttgt 360
gttgtcattt agacagttac tgattcgatc tgctttatat atgagaacgt atttttaact 420
attccaagaa ggaagaggta gctaaatgta atccccctctt cctatcccc cagaaaactg 480
aactgtaagt tctaggtaga ctaattggga gcagacacgg agtttttagat gccttagcca 540
aaccagcag aaacctttca cacagccact catcgtaaga aacgcagatt tttctcttct 600
catgcttgct tctggtccc tgcatttgta gtgacagaac tttcactagc aggatataaa 660
gaaagtaatt atgcttgag tccctcttta ctgggtttga gttaggtgca taacatggaa 720
aggagtgggt ccttcaaag aatgtgacca ctccgtattg tggagtgact tccctagggc 780
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attagatcca caactcttga ttttccacac tgaggactgt cgcgagtaag ttgtaagttt 900
gccgtcttcc ttctggctta gcaggtgctg cagctgtact ctcgactcct gtctgtgnag 960
cgtganyagg gaaaatgagg agtggagtct atttccaaaa aaaaatgtgg atggagtttt 1020
ttccttaaag tggcnttcat tggcccaatt cntttt 1057

<210> 318
<211> 1336
<212> DNA
<213> Homo sapiens

<400> 318
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agattttact ctgcagaaat cagtctagca ttaaattatc ttcagtagcg agggataatt 120
tatagagatt tgaaactgga caatgtatta ctggactctg aaggccacat taaactcact 180
gactacggca tgtgtaagga aggattacgg ccaggagata caaccagcac tttctgtggt 240
actcctaatt acattgctcc tgaaatttta agaggagaag attatggttt cagtgttgac 300

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tggtgggctc ttggagtgct catgtttgag atgatggcag gaaggtctcc atttgatatt 360
gttgggagct ccgataaccc tgaccagaac acagaggatt atctcttcca agttattttg 420
gaaaaacaaa ttgcataacc acgttctctg tctgtaaaag ctgcaagtgt tctgaagagt 480
tttcttaata aggaccctaa ggaacgattg gggtgtcatc ctcaaacagg atttgctgat 540
attcagggac acccgttctt ccgaaatggt gattgggata tgatggagca aaaacaggtg 600
gtacctccct ttaaaccaaa ttttctggg gaatttggtt tggacaactt tgattctcag 660
tttactaatg aacctgtcca gctcactcca gatgacgatg acattgtgag gaagattgat 720
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cccataattt ttgtcattct gtgttaaadc atttcagggt ttaattttga aataaaagat 1200
taatataaaa tgcaacaact ttttatatta cctattagtt ttggagttct ttatgtttaa 1260
aaattcaggt gtaaatttta ttgccttgga taaataaatt attgatcctt ttttaaggcag 1320
cagttattaa attggt                                     1336

```

<210> 319

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<400> 319

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aattcggcas aggggcgctt ctgaaactca tctttcctga tggagcggtt gaaagtgaga 60
atcgagcatt gatcaatgct caaatgctga acaattcagg attcgctagg ggaattattg 120
aagagttcca aaataataat gaccttgagt tacaacaaaa atgtattaat gtactaagca 180
catatgctat gattcaggga caaattgatg caaataagga gattgggcag ttcttcatac 240
aaactttaac acagttgaat gttcgccctg aaattttgat agaaatgaca aattcgcttt 300
tccaatttac ggggatgcct cttacggcta taatggaacc atwtttgtaa ggggtgggtt 360
tttatcyatt ctaaargacc cagttgtacc caatttgrgg cmgcmattcc aaatgggtgg 420
ttaaaaccaa atncccganc twaargaagk tgccctgggt gctttactac gttgggtagt 480
ttcatcacta caaatg                                     496

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<210> 320

<211> 1756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1718)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1721)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1733)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1750)

<223> n equals a,t,g, or c

<400> 320

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cgccgcctgc ccctgatcac ctgttccggc ccatcagcgc cgaggacgag gagcagcack 180
ccaccgagat cgagtcgcta tgcatagaact gttactgcaa tggcatgacg cgcctcctgc 240
tcaccaagat tcccttcttc agagaaataa tagtgagctc cttttcctgc gagcactgtg 300
gctggaacaa cacggagatc cagtcggcag gcaggatcca ggaccaggga gtgcgctaca 360
ctttgtctgt carggctctg gargacatga acagagaagt ggtgaagact gactctgctg 420
ccacaaggat tcctgagcta gattttgaaa ttctgcctt tagccagaaa ggagctctga 480
ccactgttga aggattgate acccgtgcta tctctggcct ggagcaggac cagcctgcac 540
gaagggcaaaa caaagatgct acagctgaaa gaattgatga gttcattgtc aaactgaagg 600
agctaaagca agtagcctcc cctttcactc tgatcattga tgatccctca gggaacagtt 660
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ggacccgaca gcaggaagag wtgctggggc ttcaagaaga agcaccagca gagaagccag 780
aagaggaaga tctcagaaat gaagtgtctc mgttcagcac aaaytgccca gaatgcaatg 840
tccccgstca gaccaacatg aagctaattg tggcttctgt cgcctggaag tagatttcct 900
taactccgtt ttccagaaat ccctcacttt aaggagggtta tcatcatggc taccaactgc 960
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cctttcacac tgggcgacag ttccaatcct ggacagacgg agagactaca ggagtttagc 1260
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gtgcacactt tctaaacagc ttgtgatgca agtgtgagcc tattgtgtta cttgacctta 1680
ttttggaagt tttgaattgg cctaggagga aacccccnga nttcagcttg ggncttacca 1740
ggcttgactn gctcaa
```

1756

<210> 321
<211> 588
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (512)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (543)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (567)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (574)
<223> n equals a,t,g, or c

<400> 321
gggaggccga ggtgggagga tcactggagc tcgggagttc aagaccagcc tgggcaacat 60
agtgaaccg tctccacaaa taatttttaa aaaattagcc aggcattggtg gtgccgcctg 120
tagtcccagc tactcaggag gcttgggttg gaggattgcc tgagaccagg aggttgaggc 180
tgcagtgagc cgtgatttca ccaccactcc agcctgggtg agaaagcaag accctatatc 240
aatgaaaaaa aaaaaaaaaa aagaccagct ttgcagccag aagccagagg ataccagagg 300
acagtagggc tcccagggtg ctggttctca gcacacctc catgaatctg cttgctgctg 360
cttcagtgtg gtggccatcg tgctgtgtga caaaccagg ctgttcacag yttcctcagc 420
cccccagaag gggagttggt cagggaagag acattttagt ttcattttgc cttgcaattt 480
tctttcttcc ttgcaagggt cttcggtggg anttcagttc accaaaacaa aaggcttaaa 540
cenggggtttt tttaaggaga gggtttntta aatncccttt tgcccgcac 588

<210> 322
<211> 738
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<400> 322

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gacagtcacn gtacngnant cccggtcgac ccacgcgtmc gagaagcagg aattcctgaa 60
ttttatgact atgacgttgc cctgatcaag ctcaagaata agctgaaata tggccagact 120
atcaggccca tttgtctccc ctgcaccgag ggaacaactc gagctttgag gcttcctcca 180
actaccactt gccagcaaca aaaggaagag ctgctccctg cacaggatat caaagctctg 240
tttgtgtctg aggaggagaa aaagctgact cggaaggagg tctacatcaa gaatggggat 300
aagaaaaggca gctgtgagag agatgctcaa tatgccccag gctatgacaa agtcaaggac 360
atctcagagg tggtcacccc tcggttcctt tgtactggag gagtgagtcc ctatgctgac 420
cccaatactt gcagaggtga ttctggcggc cccttgatag ttcacaagag aagtcgtttc 480
attcaagttg gtgtaatcag ctggggagta gtggatgtct gcaaaaacca gaagcggcaa 540
aagcaggtag ctgtcacgcc cgagactttc acatcaacct ctttcaagtg ctgccctggc 600
tgaaggagaa actccaagat gaggatttgg gttttctata aggggtttcc tgctggacag 660
gggcgtggga ttgaattaaa acagctgcga caacaaaaaa aaaaaaaaaa aaaaaaaaaa 720
aaaaaaaaag gggggggg                                     738
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<210> 323

<211> 876

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (759)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (761)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (786)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (798)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (857)
<223> n equals a,t,g, or c

<400> 323
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ncgcgatcgg tgccgcggct tctgcaggga agtggctacg cgcgtccctc gggaaaagca 120
ggctttgcaa attggcagcc caagtytcag gggcctgtgc agtgactgat cattaccaac 180
atttcgaagt gagagatgtc acataaagag cgtcatttcg agcttctctt gaaaagttgt 240
aagggtgagct accctgggac tgtattcctg aatggcaatg tgatggcaga gtcctgcagt 300
attaccacct gaggacttgt gcaccagggt tcccaccac ccacttcagg cccttggttc 360
agggatgtgc ccgtcatgga aataacagggt gctgtggctc tgctggtttt ggctttcctt 420
ctctgtaacc ttccaatc tttctccttc caggtactgt aaaccactta gtaattaatt 480
agttaataaa ttcattctcat cagcactttt aaaataatgt gctaggccac actgtcatgg 540
accccgata tacagcagca aacaaagcag ccatggtacc ttccctcagg gagcagtcag 600
tccagtggag gagtcagata tgactcacca cacagatcga aaaatctyca caaattatga 660
gaagaatgct gagggaagaa agaacatagg tggaccgct gctgagtcca ggcttacttg 720
cagagatcta tgctggccag gccctgtgct aggcagcana ngacatggaa taaaatcaaa 780
taaggncact gtgtgcangc accttacgggt gtgggaaaag gaacaagccc cattcacagg 840
gttttattaa tttccancct gtgagaaatt gggaac 876

<210> 324
<211> 1322
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1309)
<223> n equals a,t,g, or c

<400> 324
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cgctgcggcc gccgcggaat aataagccgg gatctaccat acccattgac taactatgga 120
agattataacc aaaatagaga aaattggaga aggtacctat ggagtttgtt ataagggtag 180
acacaaaact acagggtcaag tggtagccat gaaaaaaatc agactagaaa gtgaagagga 240
aggggttcct agtactgcaa ttcgggaaat ttctctatta aaggaaacttc gtcattcaaa 300
tatagtcagt cttcaggatg tgcttatgca ggattccagg ttatatctca tctttgagtt 360
tctttccatg gatctgaaga aataacttga ttctatccct cctggtcagt acatggattc 420
ttcacttggt aagagttatt tataccaaat cctacagggg attgtgtttt gtcactctag 480

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aagagttctt cacagagact taaaacctca aaatctcttg attgatgaca aaggaacaat 540
taaactggct gattttggcc ttgcagagct tttggaatac ctatcagagt atatacacat 600
gaggtagtaa cactctggta cagatctcca gaagtattgc tggggtcagc tcgttactca 660
actccagttg acatttggag tataggcacc atatttgcctg aactagcaac taagaaacca 720
cttttccatg gggattcaga aattgatcaa ctcttcagga ttttcagagc tttgggcaact 780
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ttgctctcga aaatgttaat ctatgatcca gccaaacgaa tttctggcaa aatggcactg 960
aatcatccat attttaatga tttggacaat cagattaaga agatgtagct ttctgacaaa 1020
aagtttccat atgttatgtc aacagatagt tgtgttttta ttgttaactc ttgtctatct 1080
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gtaggtctca ctgtaacaac tatttgttac tataataaaa ctataatatt gatgtcagga 1260
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ct 1322
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<210> 325

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<400> 325

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aattcggcag agctaaaaca gattcaaacc ttgaagcaga tgaacgagca actgcaggct 60
gagnacaggg ncctgacccg agtggtggcc agactctcgg agtccatcga gtcctcggac 120
accaggagc tctagtctctk gcccctactc tccaactcac ttccctcctc cactactcca 180
ggcaggttca gtcttcttgt tagtcccaga agctctgtgc tcatccccctc catccgagcc 240
tccatatgca ggttcctgca aagcttgggtt atctgcagat ggaagcagcc aggactgaga 300
tcatagaatg gggacatacc agcctagggtc aaggagggca gt 342
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<210> 326

<211> 3690

<212> DNA

<213> Homo sapiens

<400> 326

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tgcggtcgaa gaaggggacg ccgacaagag ttgaagtatt gataacacca aggaactcta 180
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gcgtccaatg cgaatttttg tgaatgatga ccgccatgtg atggcaaagc attcttccgt 300
ttatccaaca caagaggagc tggaggcagt ccagaacatg gtgttccac acggagcgcg 360
```

cgctcaaagc tgtgtccgac tggatagacg agcaggaaaa gggtagcagc gagcaggcag 420
agtccgataa catggatgtg cccccagagg acgacagtaa agaaggggct ggggaacaga 480
agacggagca catgaccaga accctgcggg gagtgatgcg ggtgggcctg gtggcaaagg 540
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caaccgcctt cctggacaag gtggccgaca acctggccat ccagcttgct gctgtaacag 660
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aagagcctcc attgtccctg accatccacc tgacatcccc tgttgtcaga gaagaaatgg 780
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gagtcattct ggctctctgc tgaggccctt gttttctggc aggtgccctc cttggaaact 3360
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gaggtttgaa acattcagtg aaacttttta aaactttgat tgcatgatgt attttttttt 3540
tagaaaagtta ttgtttgaga ataatgtctt tttataccag gaaaatagtt atcctgaatg 3600
acgttgaaaa ctccccctcc cctttatattt tttttaatca atacatgtga aagtaacaaa 3660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     3690
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<210> 327

<211> 719

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (446)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (701)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (709)

<223> n equals a,t,g, or c

<400> 327

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aattcggcag agtgcgacct caacgccagg cggttacttt gctgctcctc ccgctcgcta 60
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gcaccacgcc ggggggcacg ctatacgcca ctacccccgg aggcaccagg atcatctacg 180
accgaaagtt cctgctggag tgcaagaact caccattgc ccggacaccc ccctgctgcc 240
tccctcagat tcccggggtc acaactcctc caacagcccc tctctccaag ctggaggagc 300
tgaaggagca ggagacagag gaagagatac ccgatgacgc acaatttgaa atggacatct 360
aatccagtgc agatgacctg gcatgtggag ttacagaggg atccctcatg ccactgctgc 420
caccacctct tcctggggca tccaanagcc agctggcctc atctaactctg gaagggagtg 480
acttgttagt tccaggcctc ctttagttct gaggcagcta gaccagggat aggagtgggc 540
aacttgccaa gcccttaact ctacttcctc ttcagtctgt ggtactcctc ctaaccctaa 600
accctctatg ctcagggggt ggaactgggg aatggagtaa gtcaccttct gactgcttag 660
taaacattca aagaaaaaaa aaaaaaaaaa aaaaaaacct ngggggggnc cccgtaccc 719
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<210> 328

<211> 989

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (176)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (943)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (968)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (982)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (984)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (986)
<223> n equals a,t,g, or c

<400> 328
gcgggtgcgsa ggctctgctc ggatcgaggt ctgcagcgca ttcgggagca tgagtgctgc 60
agtgactgca gggaagctgg cacgggcacc ggccgaccct gggaaagccg ggggtccccg 120
agttgcagct cccggagctc cggcgggcggc tccaccggcg aaagagatcc cggagntcct 180
agtggaacca cgcagccggc ggcgctatgt gcggggccgc tttttgggca agggcggtt 240
tgccaagtgc ttcgagatct cggacgcgga caccaaggag gtgttcgcgg gcaagattgt 300
gcctaagtct ctgctgctca agccgcacca gagggagaag atgtccatgg aaatatccat 360
tcaccgcagc ctgcgccacc agcacgtcgt aggattccac ggctttttcg aggacaacga 420
cttcgtgttc gtggtgttgg agctctgccg ccggaggtct ctcttgagc tgcacaagag 480
gaggaaagcc ctgactgagc ctgaggcccg atactaccta cggcaaattg tgcttggtctg 540
ccagtacctg caccgaaacc gagttattca tcgagacctc aagctgggca accttttctt 600
gaatgaagat ctggaggtga aaatagggga ttttgactg gcaaccaaag tcgaatatga 660
cggggagagg aagaagacccc tgtgtgggac tcctaattac atagctcccg aggtgctgag 720
caagaaaggg cacagtttcg aggtggatgt gtggtccatt ggggtgtatca tgtatacctt 780
gttagtgggc aaaccacctt ttgagacttc ttgcctaaaa gagacctacc tccggatcaa 840
gaagaatgaa tacagtattc ccaagcacat caaccccggt gccgcctccc tcatccagaa 900
gatgcttcag acagatccca mtgscgcca accattaacg rgntgcttaa wgacctccga 960
tctttcgncc caaaaaaaaa angngnatt 989

<210> 329
<211> 434
<212> DNA
<213> Homo sapiens

<400> 329
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atgctaaata aagtacttca aactaggaat gtaaacctta taaagaagac tgtattaagg 120

atgcccctgc atactattat tccgttggtta caagagctta caaagagggtt acaaggacat 180
cctaatagtg ctgtgctaata ggttcagtgg ctaaaatgtg tggttaacagt tcatgcatca 240
tacctgtcca cgttgccctga cctggtaccc cagctgggga cactctacca gttaatggaa 300
agcagagtca aaacttttca gaaactttca caccttcatg gaaagcttat tcttctaatt 360
acacaagtaa cagcatcaga gaagacaaaag ggagcaactt cccctggaca gaaggcaaag 420
ttggtgtatg aagt 434

<210> 330

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (657)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (685)

<223> n equals a,t,g, or c

<400> 330

aattcggcac gagccaccct ggacgaagcc acccccaccc tcaccaacca aagcccgacc 60
ttaaccctgc agtccacca cagcacacg cagagcagca gctccagctc tracggaggc 120
ctcttccgct cccggcccgcc cactcgcctc ccgcctggcg aggacggctc tggtgagccc 180
tatgtggact ttgctgagtt ttaccgcctc tggagcgtgg accatggcga gcagagcgtg 240
gtgacagcac cgtaggcagc cggagaatgc agcccaagca gggcctggca tggggcagga 300
caggggtccag ccttttccta acatctgcct gtgccacaac ggccagcagg tgccccatcc 360
tctgcccaca gearactctg tcccatggct ctccgggcag tagagtgtgt gagtgcagac 420
tggacctgtg gttcatacct tgtcaccacc cgggaagctg aaggccactt yctcccagat 480
ggcctcagca ggaccatcgm cctttctcag agcagagggc caggtataga aaccgcagtg 540
ggcctgcaag ccgcccaggs ctycccagca gcctcctaca gagcaggaag agggcgccct 600
gttgaaccct gagtgtttgc aggccagca gaccctgctg ttnccaagcg caccctngct 660
ttcgaacatt aacttcctta acttngggac agtagg 696

<210> 331

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 331

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ccacggtgtc ttctaccacc tggccaagag gctcacgggg atcacgtacc tccgtgtccg 60
cagcctgccc ggagaggacc tgagggcccg tkttagctac aggctgctgg gggtcattctc 120
actgctgcac ctggtgctgt ccatggggct gcagctgtac ggtttcaggc agcggcasga 180
ngccaggaag gagtggaggc tgcaccgcgg cctgtytcac cgcaggcctc cttggaggag 240
agagccgttt ccagaaaccc cctgtgcamc ctgtgcctgg aggagcgag gcacccaaca 300
gccacgccct gcggccamct gttctgctgg gagtgcattca mcgctgtgtg cagcagcaag 360
gcggagtgtc ccctcctgcc gggagaaagt tccctcccca gaaagctcat ctaccttcgg 420
cactaccgct tgaaccggcg cccgggttgg gccttggaca caaattgaac tctacgggaa 480
ttctgaaacg cccaagattt attctccagg atttaacctt gcttgccaaa antttaaaac 540
n 541
```

<210> 332

<211> 305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<400> 332

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ggnacggaaa agcgcgagaa gcggctcggg tcccaccacg gagaggcggg agtnagtcaa 60
ctgacaagcg ctggggacag tggcgccctt gtcttgccct tgtcgctccc gccccgctct 120
tccctggctg ggctggcgga ggccttgctg atgaacctga ctgagggtcc cctggcgatg 180
gcagaaatgg accctacaca gggccgtgtg gtctttgagg acgtggccat atatttctcc 240
aggaggagtg ggggcacttg atgaggtcag agattgctgt accgtgatgt gatgcttgag 300
aattt 305
```

<210> 333

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c

<400> 333
ggtttgccaa aaantgtttg tacctctggg ccatattgca gaaccctgcc cttctttggt 60
gactgaggaa agctcgctcc ctgcccaggt ttttcattgt tgatcgaaat taacaccagg 120
tggtgaatag agcccttsct aagggtgctc aggataaatc atttattaaa taggtctgct 180
tatcaggagg ggcgtgaagg ctcccaaaag gaaatgctgg cacctgggcc cagaagccag 240
ggccttytaa ctccctgggt tgatttcttc agtgaagttg caccctacaa agggaatatg 300
gccmaagcgg gcacttcaac tggaaggctg rtatcaggcg rttagacagc catggcattt 360
ctggcggtta gtctgggaat ggggttggtg aggaggtggg acttatatng agggacttac 420
cagttccccg tttggatttt ggatg 445

<210> 334
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c

<400> 334
gaaatcttgt ctggttgaga agcaatTTTT ttcaactttg taacagagac ttgacatttt 60
taaattttta aagatgatgg actagactca agtatttttn aggactgtcc caatcataag 120
tctgaaggat ttcagtgtt atcataacat ttgacatata gttggcactt ggtaggtact 180
gaatcaatga ataggagtta ttggttgctt attcagaggc ttgtgggagt tgatcatcccc 240
attgcagaga gccagttggt gaatcagcaa ggtttccatt tatgctgctc cccctccaccc 300
agtccccctg agggact 317

<210> 335
<211> 1524
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1440)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1441)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1523)

<223> n equals a,t,g, or c

<400> 335

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tctcccgggc tgcaggaatt cggcacagaa ctgccgactc atcttttcaa aagcaaaacc 60
atctgtatta gccttgtagc ttctcaattt ggaagtggaa actttgaaat ctgttgaatt 120
actggaaatt ctcttgctag ttaaaaaaca ttccaagatt aatgacactg agttcttcta 180
ctggagagag ttggtttcta aatgcctagc cgagtattct tctcctgaat gttgcaaacc 240
agatcttaag aagttggttt ggatcgtttc aaggcgcaca gcccagaacc tccacaacag 300
ctactatagt gttcctgagc tgccaacgat acctgagggg ggttggtttg atgaaagtga 360
aagtgaggac tcttgtagaag atatgagttg tggagaggag agtctcagca gctctcctcc 420
cagtgatcaa gagtgcacct tctttttcaa cttcaaagtg gcacaaacac tgtgctttcc 480
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ggggaatagg tagtttcctg gtttagcccc catctagtca ggaattaata tactggaata 600
cctaccttct atttgttatt cagatcagat ctggcctatt ttcataattta tcctaagcca 660
tcaaattggg tagtgacctc taaaccatta acagtacttt agacattggc actttatttt 720
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cttttcaaga tttttaaaaa taactagtgt agcttatctt aaacatttta taaaaccttc 840
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ccttaatggg ttatcataga tttcacccctc ccccttctc agaagagtga gtatgctctt 960
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atgtcttaat tgagatttct gtttaaggcag aaataattag gctagggctc ttagttttca 1140
ttcctattgc ccaagtattg tcaaactatg gtattatttt aatgttactt taaaaatcca 1200
taatctgcta gttttgcatg tacttatatg aaaacagtgc agtaagttga aaactcagta 1260
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gtgccaagat tgaatatgaa gaacccgagt gttgagatat agtttaagca atctggtggn 1440
ntcagctaga tgggctatta cttgaatgag attgcaggat ttacttataa tgttactgaa 1500
cttaagctaa ntgtttactg ggna 1524

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<210> 336

<211> 306

<212> DNA

<213> Homo sapiens

<400> 336

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atatatacgt ggcgtaaaaat gtacatgaaa taacaagtca ctactcaaaa agtacatttt 60
ttttctctc agagccttat tagcaattgg caatcttaaa atttcatctc ctaagcaggg 120
tccttatcag atattccttg acccccttat gttaagtgtc ttagccactc attgttaagc 180
caactgctaa aatcttagaa aaatatttca gccttctcct accccatccc ccacccccac 240
aagcttctag cttcttctac ctacagcaaa tgttaaaact ggtcagaagt tatattattt 300
actctg 306

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<210> 337

<211> 291

<212> DNA

<213> Homo sapiens

<400> 337

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atgcaaataa aatcaagtca tagttaaact tgcttatgtc aacgattctg ttcttgcaag 60
acctacctgg cctcaagaga aattattttc cagggcccaa cacattggtg ttttatcagc 120
acctaattga cctggggaaa gcagaatgcc taactccagc ctgtggtatt ttgttatggc 180
aggctgagca gactaataca gactttaata tacagactaa aagtaaaggg atggagaaaag 240
atacccttag tcaaaataaa gaaagtagtt atgttaatct aagacagagc t 291
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<210> 338

<211> 1264

<212> DNA

<213> Homo sapiens

<400> 338

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gccccagga gttggaaaaa caacattgat ccataaagcc agtgaggttt taaaatcctc 180
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tccacctgga aaacgtgaat gccgagttgg gcagtatgtg gtcgacctga cttcttttga 360
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gtgcgtcatc gatgagattg ggaagatgga gctcttcagt cagcttttca ttcaagctgt 480
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<211> 759

<212> DNA

<213> Homo sapiens

<400> 339

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<210> 340

<211> 2639

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

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<222> (1651)

<223> n equals a,t,g, or c

<400> 340

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<210> 341

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1807)

<223> n equals a,t,g, or c

<400> 341

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<210> 342

<211> 4531

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<400> 342

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<211> 584

<212> DNA

<213> Homo sapiens

<400> 343

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<210> 344

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 344

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<210> 345

<211> 3740

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (223)

<223> n equals a,t,g, or c

<400> 345

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<211> 446

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

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<222> (427)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

<400> 346

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<210> 347

<211> 782

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 347

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<210> 348

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (369)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (420)

<223> n equals a,t,g, or c

<400> 348

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<210> 349

<211> 2356

<212> DNA

<213> Homo sapiens

<400> 349

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<210> 350

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 350

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<210> 351

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (397)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<400> 351

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tgacgtggct agatttattg kttttttagc ttcttcatct acaagcagag atggtaaacc 360
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<210> 352

<211> 1283

<212> DNA

<213> Homo sapiens

<400> 352

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<210> 353

<211> 3229

<212> DNA

<213> Homo sapiens

<400> 353

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<210> 354

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<400> 354

```
gcccacgcgt ccgcccacgc gtccgcccac gcgtccgaga agttgcttag tcatgtctgg 60
ccgtggtaaa ggtggaaaag gtttgggttaa gggaggrgct aagcgtcatc gcaagggttt 120
gcgcgataac atccagggca tcaactaagcc agctatccgg cgccttgctc gtcgcggcgg 180
tgtcaagcga atttctggcc ttatctatga ggagactcgy ggtgttctga aggtgttcct 240
ggagaacgtg attcgtgacg ctgtcaytta cacagagcac gccaaacgca agaccgtgac 300
agcaatggat gtggtctacg cgctgaagcg acagggacgc actctttacg gcttcgggtgg 360
ctaaggctcc tgcttgctgc actcttattt tcattttcaa mcaaargccc ttttcagggc 420
sgccamtttt ttcataaaaag agcaagacat cttgktatcc tgctttggtn caaaattttg 480
ctgagaagaa gtactgggca catgng 506
```

<210> 355

<211> 742

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (80)

<223> n equals a,t,g, or c

<400> 355

```
cttacctgtt tttccagctc acccactgcc agcagagaat gctgtccagt ttcaacgagt 60
ggttttggca ggacaggtnn tggttaccac ccaatgtcac gtggacagag ctagaagacc 120
gggaatggcc gtgtctaccc ccacccccag gacttggttg cagccctgcc cctggcgctg 180
gtcctcctgg ccatgcgcct tgcctttgag aagattcatt ggcttgcgcc tgagccgggtg 240
gakgrgtgtg agggatcaga ccaggaggca agtgaagccc aacgccacgc tggagaaaca 300
cttcttcacg gaagggcaca ggccaaggag cccagctgt ctctcctggc cgcccagtg 360
```

```
ggcctcacgc tgcagcagac ccagcgatgg ttccggagac gccggaacca ggatcgaccc 420
cagctgacca agaagttctg tgaggccagc tggagggttc tcttctacct gtcctccttc 480
gtgggcggcc tctcggtcct gtaccacgag tcatggctgt gggcaccagt aatgtgctgg 540
gacaggatcc caaaccagac tctgaagcca tccctgtamt ggtggtamct cttkggagct 600
gggtttctwa cytctcawtg yttaatcagg tgcctttgat gttcaagcgc aaggattttc 660
aaggagcagg tkgatacamc attttgkggc ggttcattcc tgattgaact ttttcttaca 720
gttgccaact tgttgcggaat tt 742
```

<210> 356

<211> 1695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 356

```
gccacgcgt ccgccacgc gtcngccac gcgtccggta gttttctctg cgcgtgtgcg 60
ttttccctcc tccccgccct cagggtccac ggccaccatg gcgtattagg ggcagcagtg 120
cctgcggcag cattggcctt tgcagcggcg gcagcagcac caggctctgc agcggcaacc 180
cccagcggct taagccatgg cgcttctcac ggcatcagc agcagcgttg ctgtaaccga 240
caaagacacc ttcgaattaa gcacattcct cgattccagc aaagcaccgc aacatgaccg 300
aaatgagctt cctgagcagc gaggtgttgg tgggggactt gatgtccccc ttcgaccagt 360
cgggtttggg ggctgaagaa agcctaggtc tcttagatga ttacctggag gtggccaagc 420
acttcaaacc tcatgggttc tccagcgaca aggctaaggc gggctcctcc gaatggctgg 480
ctgtggatgg gttggtcagt ccctccaaca acagcaagga ggatgccttc tccgggacag 540
attggatggt ggagaaaatg gatttgaagg agttcgactt ggatgccttg ttgggtatag 600
atgacctgga aaccatgcca gatgaccttc tgaccaggtt ggatgacact tgtgatctct 660
ttgccccctt agtccaggag actaataagc agcccccca gacgggtgaac ccaattggcc 720
atctcccaga aagtttaaca aaacccgacc aggttgcccc cttcaccttc ttacaacctc 780
ttcccccttc cccaggggtc ctgtcctcca ctccagatca ttcctttagt ttagagctgg 840
gcagtgaagt ggatatcact gaaggagata ggaagccaga ctacactgct tacgttgcca 900
tgatccctca gtgcataaag gaggaagaca ccccttcaga taatgatagt ggcactctgta 960
tgagcccaga gtctatcttg gggctctctc agcacagccc ctctaccagg ggctctccaa 1020
ataggagcct cccatcttcc aggtgttctc tgtgggtctg cccgtcccaa accttacgat 1080
cctcctggag agaagatggt agcagcaaaa gtaaagggtg agaaactgga tctccttggc 1140
caggaatcc gccctctctt ttagagcctc gttcttcttt tccagctctt tgcactcacc 1200
agtaagagcc tcctgctccg ccctcttctt ctggcggtag ctagtggctg ctgtcttggt 1260
ttgtccatt tttttcagct tcttatccag tttctcacc tttacttttg ctgctacat 1320
cttctctcca ggaggatcgt aaggtttggg acgggcagac ccacagagaa cacctggaga 1380
tgaggagctc ctatgttgag agcccctggt agaggggctg tgctgaggag accccagata 1440
ggactctggg ctcatacaga tgccactatc attatctgaa ggggtgtctt cctcctttat 1500
gcactgaggg atcatggcaa cgtaagcagt gtagtctggc ttcctatctc cttcagtgat 1560
atccacttca ctgcccagct ctaaaactaaa ggaatgatct ggagtggagg acaggacccc 1620
tgaggaaagg ggaaagaagg aaggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaaa 1695
```

<210> 357

<211> 928

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (928)

<223> n equals a,t,g, or c

<400> 357

```
gctgcgcgcg ggcgagctgc cgcgagcac ccggcagggg ctgacagcat ggcctcgccc 60
gacccgcccc ccaccagcta cgccccgtcc gacgtgccct cgggggtcgc gctgttcctc 120
accatccctt tcgccttctt cctgcccagag ctgatatttg gggtcttggt ctggaccatg 180
gtagccgcca cccacatagt atacccttg ctgcaaggat gggatgatga tgtctcgctc 240
acctcgtttc tcatctcctt gatgttcctg ttgtcttact tgtttggatt ttacaaaaga 300
tttgaatcct ggagagtctt ggacagcctg taccacggga ccactggcat cctgtacatg 360
agcgtgcgcg tcctacaagt acatgccacg attgtttctg agaaactgct ggaccaaga 420
atttactaca ttaattcggc agcctcgttc ttgccttca tcgccacgct gctctacatt 480
ctccatgcct tcagcatcta ttaccactga tgcacaggcg ccaggccaag ggggaaatgc 540
tctttgaaag ctccaattat tgggtcccaa aagcagcttc caacgtttgc catctggatg 600
acaaacggaa gatccactaa aacgtccacg ggattaacag aacgtccttg cagactgagc 660
gatgacacca cactttgttt ggacatttaa attcactctg ctgaatagga ggaagctttt 720
ctttttcctg ggaaaacaac tgtctcttg aattatctga ccatgaactt gctcttctag 780
acaactcaca tcaaagccct cactccacta atggagaatc ctagcccccac taatgccaag 840
tctgtttggg grttttgcct cagctatggg cttccctaga gtaggtctag gggaatatca 900
rtccgatctt tttttttgtt ttgttttn                                     928
```

<210> 358

<211> 1374

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1374)

<223> n equals a,t,g, or c

<400> 358

```
ggtcgtgggt gggaattgtc gcctaagtgg ttccgggttg gtggatgacc ttgagccctc 60
aggaacgaga tggcggttct ctggaggctg agtgccgttt gcggtgccct aggaggccga 120
gctctgttgc ttcgaactcc agtggtcaga cctgctcata tctcagcatt tcttcaggac 180
cgacctatcc cagaatggtg tggagtgcag cacatacact tgtcaccgag ccaccattct 240
ggctccaagg ctgcatctct ccactggact agcgagaggg ttgtcagtgt tttgctcctg 300
ggctctgcttc cggctgctta tttgaatcct tgctctgcga tggactattc cctggctgca 360
gccctcactc ttcattggtc ctggggcctt ggacaagtgt ttactgacta tgttcatggg 420
gatgccttgc agaaagctgc caaggcagg cttttggcac tttcagcttt aacctttgct 480
gggctttgct atttcaacta tcacgatgtg ggcactctga aagctgttgc catgctgtg 540
```

```
aagctctgac ctttttgact tcatactttg aagaattgat gtatgcctct ttgcctctgc 600
tttgtcatgc cattaagctc acaataagga agaaataaca gataagtcca ttggtggaca 660
gccttcttct cttaatcaca agattatttt cagaatttaa tctttgagga aaagggttga 720
gaggaattat atctaagttg tgagactgag ttctatattc tggtagagta atgggggtgc 780
ctcccagctt cttataagac tcacagtata actaaacatg atatatcagc ttttgccttt 840
caatttatca atctcttaaa gagaatccaa ctttattacg attagtatat gatcaaactt 900
ccatatttgc cttgggaata atggacaaaag ggaaatactc ttaattcatg aataaaaaact 960
ttgcagaaaa ttagacagtg ttttaattttc gaaaacttcc ctctctagac agtagatacc 1020
acctactgat ggttacatat actagggaaa ttttaaaatt aggaaatgct gatagctcat 1080
attataaatt tctaaatcct aggaagaaac gcttggagtg cttctgaata tacagaagtt 1140
ccatttaagg gcaagtttcc ccgtagatgt atcaaaatac taccaactgt aaattgagat 1200
ttaattccca aatgtattct acttgttcta aaacaatctg tccacaaata taaaactata 1260
agtaataaat tgttattttc gcacaatggg aatctctaat gtgaaaatgt attctatgaa 1320
aataattttt ttaaataaaa tgttatataa taaaaaaaaa aaaaaaagaa aan 1374
```

<210> 359

<211> 4152

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (65)

<223> n equals a,t,g, or c

<400> 359

```
tggtgtcttc acggatctcg gcctgagggg gtggggggaga aggcctggac agcctcaggg 60
caggntgtgt tttccacca gccgcagaga gccaggatgg acgttcctcg gacggacggg 120
tttctgtctt gggaatgttc ctgggctgtg agatccactc ttctgggcag gtggttagca 180
cctaacgttt ttccctcact tcccccaaa ttcttaagtc ctttgggtcca tttcactgct 240
cggaccttga gacaacagtc attctgcctg agtctgtctt cagagagacg cccccctgg 300
tcaggccccg agccccggag agggccagga gccagaggag ctggcacggc gacagcgacg 360
gcacccggag ytgagccagg gtgaggytgt ggccagcgtc atcatctacc gcaccctggc 420
cgggctactg cctcataact atgaccctga caagcgcagc ttgagagtcc ccaaaccgcc 480
gatcatcaac acaccctgg tgagcatcag cgtccatgat gatgaggagc ttctgccccg 540
ggccttgga aaaccctga cgggtcagtt ccgctgtctg gagacagagg agcggacca 600
gccatctgt gtcttctgga accattcaat cctggtcagt ggcacagggt gctggctggc 660
cagaggctgt gaagtcgtct tccgcaatga gagccacgtc agctgccagt kcaaccacat 720
gacgagcttc gctgtgctca tggacgtttc tcggcgggag aatggggaga tcctgccact 780
gaagacactg acatacgtgg ctctaggtgt crcttggtg gcccttctgc tcaccttctt 840
cttctcact ctcttgctga tcctgcgctc caaccaacac ggcacccgac gtaacctgac 900
agctgccctg ggcctggctc agctgggtctt cctcctggga atcaaccagg ctgacctccc 960
ttttgsetgc acagtcattg ccactcctgt gcacttcctg tacctctgca ccttttctct 1020
ggctctgtct gaggccttgc acctgtaccg ggcactcact gaggtgcgag atgtcaacac 1080
cggcccatg cgttctact acatgctggg ctggggcgtg cctgccttca tcacagggt 1140
agcgtgggc ctggaccccc agggctacgg gaacctgac ttctgctggc tctccatcta 1200
tgacacgtc atctggagtt ttggtggccc ggtggccttt gccgtctcga tgagtgtctt 1260
cctgtacatc ctggcggccc gggcctcctg tgctgcccag cggcagggt ttgagaagaa 1320
aggtcctgtc tcggcctgc agccctcctt cggcgtcctc ctgctgctga gcgccagtg 1380
gctgctggca ctgtctctg tcaacagmga caccctcctc ttccactacc tctttgstac 1440
ctgcaattgc atccagggcc ccttcactt cctctcctat gtggtgctta gcaaggaggt 1500
```

ccggaagca ctcaagcttg cctgcagccg caagcccagc cctgaccctg ctctgaccac 1560
caagtccacc ctgacctcgt cctacaactg cccagagccc tacgcagatg ggcggctgta 1620
ccagccctac ggagactcgg ccggctctct gcacagcacc agtcgctcgg gcaagagtca 1680
gcccagctac atcccccttct tgctgagggg ggagtccgca ctgaaccctg gccaaaggcc 1740
ccctggcctg ggggatccag gcagcctgtt cctggaaggt caagaccagc agcatgatcc 1800
tgacacggac tccgacagtg acctgtcctt agaagacgac cagagtggct cctatgcctc 1860
taccactca tcagacagtg aggaggaaga agaggaggag gaagaggagg ccgccttccc 1920
tgagagcag ggctgggata gcctgctggg gcctggagca gagagactgc ccctgcacag 1980
tactcccaag gatggggggc cagggcctgg caaggccccc tggccaggag actttgggac 2040
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tgccctgtct cgagaggggt ccctaggccc ccttccaggc tcttctgccc agcctcacia 2160
aggcatcctt aagaagaagt gtctgcccac catcagcgag aagagcagcc tcctgcggct 2220
ccccctggag caatgcacag ggtcttcccg gggctcctcc gctagttagg gcagccgggg 2280
cgkccccctt ccccgcccac cgccccgga gagcctccag gagcagctga acggggctcat 2340
gcccctcggc atgagcatca aggcaggcac ggtggatgag gactcgtcag gctccgaatt 2400
tctcttcttt aacttcctgc attaaccttg ggccgtgggt cctamgcccg aggcctcctt 2460
cccttcccca gccgcactca tgccctgctc ctgtcttctg ctttctcctg ccccgctccc 2520
catcgctgc cgcagcagcg acgaaacgtc catctgagga gcctgggcct tgccgggagg 2580
ggtactcacc ccacctaaag ccatctagt ccaactcccc cccaccatt cccctcactg 2640
cactttggac ccctggggcc aacatctcca agacaaagt tttcagaaaa gaggaaaaaa 2700
agaatttaaa aaaggatctc cactcttcat gacttcaggg attcattttt tttatacgt 2760
ggaaattgac tcccctttcc cttcccaaag aggataggac ctcccaggat gcttcccagc 2820
ctctcctcag tttcccatct gctgtgcctc tgggaggaga gggactcctg gggggcctgc 2880
ccctcatag ccataccaa aaggaaagga caaagccaca cgcagccagg gcttcacacc 2940
cttcaggctg caccgggca ggccctcagaa cgggtgaggg ccagggcaaa ggggtgtgct 3000
cgtcctgccc gcactgcctc tcccaggaac tggaaaagcc ctgtccgggt agggggcaga 3060
aggactcagc gcccctggac ccccaaagtgc tgcataaaca ctttttcagg ggagcctgtg 3120
ccccaggcg ggggtcgggc agscccagcc cctctccttt tcctggactc tggccgtgcg 3180
cggcagccca ggtgtttgct cagttgctga cccaaaagt cttcattttt cgtgcccgc 3240
ccgcgccccg ggcaggccag tcatgtgtta agttgcgctt ctttgcctgt atgtgggtgg 3300
gggaggaaga gtaaacacag tgctggctcg gctgccctga ggttgcctca tcaagcacag 3360
gtttcaagtc tgggttctgg tgtccactca cccacccac ccccaaaaat cagacaaatg 3420
ctactttgtc taacctgctg tggcctctga gacatgttct atttttaacc ctttcttgg 3480
attggtctc ttcttcaaag gaccaggctc tgttccctct tctccccgac tccacccag 3540
ctccctgtga agagagagtt aatatatttg ttttatttat ttgctttttg cgttgggatg 3600
ggttcgtgtc cagtcgccgg ggtctgatat ggccatcaca ggctgggtgt tcccagcagc 3660
cctggcttgg gggcttgacg cccttcccct tgccccaggc catcatctcc ccacctctcc 3720
tccccctctc tcagttttgc cgactgcttt tcatctgagt caccatttac tccaagcatg 3780
tattccagac ttgtcactga ctttcttctt ggagcagggt gctagaaaaa gaggctgtgg 3840
gcaggaaaga aaggctcctg tttctcattt gkgaggccag ctctggcttt tctgccgtgg 3900
attctcccc tgtcttctcc cctcagcaat tcctgcaaa ggttaaaaaa ttaactgggt 3960
tttactactg atgacttgat ttaaaaaaaa taaaaagat ctggatgcta acttgatact 4020
aaccatcaga ttgtacagtt tgggtgttgc tgtaaatatg gtagcgtttt gttgtgtgtg 4080
ttttttcatg cccatacta ctgaataaac tagttctgtg cgggtamaaa aaaaaaaaaa 4140
aaaaaaaaaa aa 4152

<210> 360

<211> 1156

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<400> 360

```
gggtccgagac acagtcgtgg gcaccatggg cctgaaggcc acggggccgnc tctgcaccgt 60
ggctaaggca agggggctgc gagcctgcag gggagagctg agggacacca tcctagactg 120
ggaggactcc ctgcccagacc gggacctggc actcgccgat gagccagcag gaacgcccag 180
ctgtccatca cgctgggtac atcgctgcag atccggccca gcgggaacct gccgmtggct 240
accaagcgcc ggrkaggccg cctggtcatt gtcaacctgc agcccaccaa gcacgaccgc 300
catgctgacc tccgcatcca tggctacgtt gacgaggcca tgacccggct catgaagcac 360
ctggggctgg agatccccgc ctgggacggc ccccgctgtg tggagagggc gctgccaccc 420
ctgcccgcgc gccaccccc aagctggagc ccaaggagga atctcccacc cggatcaacg 480
gctctatccc cgscggmccc aagcaggagm cctgcgcca gcacaacggc tyararcccg 540
ccagcccaaa acgggagcgg cccaccagcc ctgcccccca cagaccccc aaaagggga 600
aggccaaggc ggtccccagc tgaccagggc gcttggggag ggtggggctt tttgtagaaa 660
ctgtggattc tttttctctc gtggtctcac tttgttactt gtttctgtcc cygggagcct 720
cagggtcttr aragctgtgc tccaggccag gggttacacc tgccctccgt ggtccctccc 780
tgggctccag gggcctctgg tgcggttccg ggaagaagcc acaccacara ggtgacagct 840
gagccctgc cacaccccag cctctgactt gctgtgttgt ccagaggtga ggctgggccc 900
tccctggtct ccagcttaaa caggagtga ctccctctgt cccagggcc tcccttctgg 960
gccccctaca gccacccta cccctcctcc atggggccctg caggagggga gaccacctt 1020
gaagtggggg atcagtagag gcttgcaactg cctttggggc tggagggaga cgtgggtcca 1080
ccaggcttct ggaaaagtcc tcaatgcaat aaaaacaatt tctttcttgc aaaaaaaaaa 1140
aaaaaaaaaa aaaaaa                                     1156
```

<210> 361

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (374)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<400> 361

```
tgggaagtga ttttgggag ctaattgagg cctanggtga aaaaggaaat agcttcagat 60
waaaaytaga aagaagcttt ctgagaaact gctttgtgat rtgtgcattc atctcacaga 120
ggtaaattctt tcttttgatt cagcagtttg gaaacctggc taacatgggtg aacctcggtgt 180
ctactgaaaa tacaaaaaat tagccagggtg tgggtggcaca atgctgtaat cccagctact 240
caggaggctg aggaggaga atcgcttgaa cccgggagggt gggagggttac agtgagccaa 300
gtttgtgcca ctgcattcca gcctgggctt atagagtggg acttccgtct tcaaaaaaaaa 360
aaaaaaaaa nctngn 376
```

<210> 362

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<400> 362

```
ccctaagcca tttttgaaga gaggacctgc cctagcttta tgacttaaga ccatgactat 60
gcatcttaag ttgcccctct gactgggcag ctttctcctg aacacagtga ggaatgctaa 120
gttacatggt ccagtaamtg agtggatacc ctgagcccc gcatcccact ggctgctatg 180
cagggataag tccatgcacc tgtggatggc agtgggtgag ctggttctct ataaaagtat 240
ccagtgccca gacctttggt cacacatgca tgtaaattta ctgggaaaac tctagagacc 300
aatgttcttt cttccacaga aatctggcct agcagtctat tcttaaattg ctctttgtgt 360
gtaagacaca tctgtttgat accccactct gccctgactt ttaggcaaata ccgttaggac 420
aggaaccact attttctttc cttccctttg aatcatcttt taaagcagca gaggcaatgt 480
tkggcagagg tccacattgg gaaagttagt gcatcanga 519
```

<210> 363

<211> 1385

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1320)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1340)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1350)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1360)

<223> n equals a,t,g, or c

<400> 363

```
acggtcggat tcccggtcga cccacgcgtc aggacggctc cggaccgcgc agttagcgcc 60
gcctggcctg ggccggaccc ggtcaggggt ctcaagctgt cgtccctatg gggctgtgtt 120
ttccttgtcc cggggagtcc gcgcctccca cggcggacct ggaagagaaa agagcaaagc 180
ttgcagaggc tgcagagaga agacaaaaag aggctgcatc tcggggaatt ttagatgttc 240
aatctgtgca agaaaagaga aagaaaaagg aaaaaataga aaaacaaatt gctacatccg 300
ggcccccacc agaaggtgga cttaggtgga cagtttcata aagcataaca tgagtagaag 360
aatctactgc caataactgt ttattatctg caatcaagtg ggcttcatca atttaatttc 420
ttctctttga gtaaatgaag attcagactt tgtaatatta ttgcccttaa gtgcaatgct 480
aaaaaacgt tgattttcaa gcttagagaa tggctagact tttcattaaa tactgatttt 540
cctacatttg ctcttctgca gttagtgggt gatttgctat ttttcttagt agttaaaaaa 600
tggaactaaa tagtgaatat acatacactg catgtaaaca ttctgcatat acctctaaga 660
ttaaaattcg cagttgtctt ttcattcctt ataaaatgat ctaactactt atatttgtgc 720
tgcacgcgt tacatctgtt tttatttcac tatgaagatg tttgattaaa cttatggact 780
tagtgccttt aaactgatca tcaggagagaa tcttgaaaaa atcatttgaa gggctgatgt 840
gaaggagcac tgtaaatttt tataacttag taatgagtat tcttaggcag atgtaaaatt 900
ttttccaatt tatttttatt tatgtagctt ataaaattaa cataccctgt tttactttat 960
gataaaggat tttttgtttg ctgaatttaa aattatatat tagtgatacc atcagagggc 1020
agtgatgttc tattgtatat taaattcagc tctgtaagga tctttgtagt aattgaatga 1080
gttaaactaa taatctggat gggttataat gagtagtaat atatttgtcc atatttcata 1140
agtagtgkta atcttgkgka cttattagag gaacgatcat aaggatttat acaggatgtg 1200
gaaactgcgg aaggcaagtt atkgaatgta tgraaaaaaa catgtagggt actgkacttt 1260
acaaaaggg tctacttcca ggatattaaa aatattaggg gtaattctat taccatgccn 1320
aggtccttaa cccttaaccn ttttgttccn tagggaaccn ggattttatg gccttttttg 1380
gtttc
```

<210> 364

<211> 977

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (962)

<223> n equals a,t,g, or c

<400> 364

```
aacaanacct ccataacctt ccccnaaatg aaaaccccc caaagtataa gccgccatat 60
tttccggata tttttggtgg aattccccc aaagggaaatc cacagggctg ttccgaaata 120
ttgggggaac actgtttttc ctgcatcatc ctgcatttgc tccccaaagca atgtagaggt 180
gtttaaaggg ccctctgctg gctgagtggc aatactacaa caaacttcaa ggcaagtttg 240
gctgaaaaca gttgacaaca aaggggcccc atacacttat ccctcaaatt ttaagtata 300
tgaaatactt gtcatgtctt tggccaaatc agaagatatt catcctgctt caagtcagct 360
tcagaaatgt tttaaaaggg acttttagctc tggaaactcaa aatcaattta ttaagagcca 420
tattctttta aaaaaaaaaa gctggataat attmtctgta atatttcagt cttttacaag 480
ccaaatacat gtgtcaatgt ttctagtatt tcaaagaagc aattatgtaa agttgttcaa 540
tgtgacataa tagtattata attgggttaag tagcttaatg attaggcaaa ctagatgaaa 600
agattagggg cttccacact gcatagatta cacgcacata gccacgcata cacacacaga 660
cacacagatg tgggggtacac tgaacttcaa agcccaaagc aatagaaaca cattttctgg 720
ctagcagaaa aaaacaaaac aaaactgttg tttctctttc ttgctttgag agtgtacagt 780
aaaagggatt ttttcgaatt atttttatat tatttttagct ttaattgtgc tgtcgttcat 840
gaaacagagc tgctctgctt ttctgtcaga gatggcaagg gctttttcag catctcgttt 900
atgtgtggaa tttaaaaaga ataaagtttt attccattct gtgtgaatgg tttgagcagt 960
gngaaaagga caaaaaa 977
```

<210> 365

<211> 964

<212> DNA

<213> Homo sapiens

<400> 365

```
gttcggcaca gaaagggaga tgggtagcat cattttgatt aacatttggg gcctgatagg 60
ggaaatggtg aagcaatgga aaagaacaga caactaatga tttgcttcta tgtccagaat 120
attttacctt taaaaaatg tcattggcac cataaataag gactgtgaga gactgtttaa 180
aagctgtgaa agtctgaaac ctataagcca aggtgttccc tgcctaaact tattgtctgt 240
cccacaaagg actaagcctg ttcataagtt accaaagttg ccattttgga gatggaaatt 300
gacgaggagg gaaggtcttt tattggagag tatacagtac aagcagatca ttctgcctta 360
gaggtgctaa ttcccgaat tagaagaccc tttcttttcc agtaacgaag ttataaatat 420
cagcttgctt atccaagcca ctggctgagg tgttaggaag aggaagaggg tggtagagga 480
ggtaagacag tagggaaaga caagggccca tgctcttagt ggggaaaact cttggagccg 540
tttactttga gctttgaaca ctgaaaccat tgttggcagg gttcagtcac tgacagcaca 600
agtttcactg aattgatcca agagtttagt gatttcaaaa gccttggtct caggagaaga 660
ttaaactttc atattgggca gtggttcact ttaaaacaca cacatacaca cacaaaacaa 720
ttttttaaga aatcctaata agtaacatac caaaatgct ctgtcttgag tcatgagaac 780
catcagttct tgatattgtc tagacttgca tctagagcta cgttgtaaaa ttcttttagg 840
catgtgttag atttctgtgt aaactttgtt taaatgtaaa cttcatacta cattgtcagt 900
ttttgtctta ataaaactat agatttataa aaaaaaaaaa aaaaaccgcg gggggggggc 960
ccgg 964
```

<210> 366

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 366

```
gtggcttacg cctgtaatcc cagcactttg ggaggccgag gcaggcggat cacgaggtca 60
ggagttcgag accagcctga ccaacatggc gaaaccccggt ctctactaaa aatacaaaaa 120
```

```

ttagctgggc gttatggcgg ggcctgtaa tcccagctac ttgggaggct gaggcagaag 180
aatcgcttaa acccaggagg cggagggtgc agtgagctga gatcatgcca ttgcactcca 240
gtctgggcga caggagcaag actctgtctc aaaaaaaaaa atcattcttt ttagtcttag 300
cacctactta aggatccact tttagggtc acccacattt gtttctagat ttaccctctgc 360
gctagagtaa gcactttatc tccagaactg agagcaaagt taacaaatct cacccttct 420
ctcctgcaaa ttagtggaaca gactccctgg aacatgtttg gggcttccac ctaggggccac 480
ctagtggat ctctgggtct ttacttggtc agatgtttat tctacattgt tcccaggaa 540
cagagtatga gctcattgat gcagaccgat tctaattgcc aggcccta attgagacta 600
actctcataa taaacagagg cccatagttg tttatgaact gcttatccct taaaggagca 660
caagaacccc tcctgcccct ccttgggcac cctgcctcca ggagatggag gcacgtgata 720
agacaaaaga ctgcaccaac tcaccctgac acagttacat agtcaactgag agtgggggag 780
atgggacagc ccacatgctg cataagatgg gccttatgca gcaggcccag gtcgtcatta 840
aggagtgacc ctttctctgt aacctgcact ttgggatggt agaagtttct ttacctgctg 900
acaggtttg tggcactgct gggtaccct gggccctgaa tggagctaaa atcacatttg 960
gtaccagcag cacctatccc aagtgtgatc ctcatccca aactccctc ttggagctgt 1020
tcctgggta gagctagcat gccagcagct tctgcaggct ccaaaccag gccagaagcc 1080
agaccaggc ctgctgcctg catctgcatt cctccttcc agtgttcctt agaacagaca 1140
tttaggtatc tcaggtcctt tctaagtgtc ctttctctat gtatgcattt ctttttttg 1200
tctttactat gcactttagc ttataaagcc aattaaaaac gatgattgag aaaaaaaaaa 1260
aaaaagggc ggcgtctta gaggatccaa agcttac 1297

```

<210> 367

<211> 785

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (746)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (753)

<223> n equals a,t,g, or c

<400> 367

```

gcggtggtt tcttggtgag cccgggtccc tcaaggccgg aaagaaagtc gggcttctct 60
agcccctgga ggactcgact cactggtgcg cgatttaggt ccggagaggc gttgtgaggt 120
gagctttttc agaagcgcga tcccaggaca cgtcgggaag caagcatccc cagagctgct 180
tggaagagg accaaagacg tctaaaaagt catttggaat tatctctaaa tatttggtac 240
catgtataag ctgctaaaga gaaattgggc ccaacaaaac taattgaata attgaggcag 300
atttgtgtgt atcatcaaat tctatccaga agttgaagaa tctgaattta aagattgtgt 360
gcatttaata agaggatgac ctttcagttt aatttcacta tagaagacca tctggaaaaat 420
gaattaacac ccattagaga tggagctttg accctggatt cctcaaaaga gctgtcagtc 480
tcagaaagtc aaaaaggaga agagagggac agaaaatggt ctgcagaaca atttgacttg 540

```

```
cctcaggatc acttgtggga acataagtca atggaaaatg cagctccctc tcaagacaca 600
gacagtccac tcagtgcagc cagcagttca aggaacttgg gagccacatg ggaaaacagc 660
cctccttgag agctggccaa aggrgcmgtc tatgccttaa aggnntttaa gaagrtgttt 720
aggaaaatwa aagtycttag gaaacnttta ccnggggtttt ccmgyctgtt taagttwttc 780
rgtta 785
```

<210> 368

<211> 920

<212> DNA

<213> Homo sapiens

<400> 368

```
ggcagagctc atgccatcac agtatctgtt gcaaatraaa aggcactagc taagtgtgag 60
aagtacatgc tgaccaccca ggaactagcc tccgatgggg agattgaaac taaactaatt 120
aaggggtgata tttataaaac aaggggtggt ggacaatctg ttcagtttac tgatattgag 180
actttaaagc aagaatcacc aaatgggtgt ctgtggctgt ggagatgaga gcaggatccc 240
agctgggacc tggatatcag catcacgcac aacccaagcg caaaaagcca tgaactgaca 300
gtcccagtac tgaaagaaca ttttcatttg tgtggatgat ttctcgaaag ccatgccaga 360
agcagtcttc caggtcatct tgtagaactc cagctttgtt gaaaatcacg gacctcagct 420
acatcataca ctgaccacga gcaaagcttt ccctatgggt ccaaagacaa ctagtattca 480
acaaaccttg tatagtgtat gttttgccat atttaatat aatagcagag gaagactcct 540
tttttcatca ctgtatgaat tttttataat gtttttttaa aatatatttc atgtatactt 600
ataaactaat tcacacaagt gtttgtctta gatgattaag gaagactata tctagatcat 660
gtctgatttt ttattgtgac ttctccagcc ctggtctgaa tttcttaagg tttataaac 720
aaatgctgct atttattagc tgcaagaatg cacttttagaa ctatttgaca attcagactt 780
tcaaaaataaa gatgtaaatg actggccaat aataaccatt ttaggaaggt gttttgaatt 840
ctgtatgtat atattcactt tctgacattt agatatgcc aagaattaa aatcaaaagc 900
actaagaaat amaaaaaaaaa 920
```

<210> 369

<211> 834

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (533)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<400> 369

```
cctagaacgc tttgcgtccc gacgcccgc ggtcctcgcg gtgcgcaccg tttgcgactt 60
ggtagcttga aaaatggaca aggattgtga aatgaaacgc accacactgg acagcccttt 120
gggggaagctg gagctgtctg gttgtgagca gggctctgcac gaaataaagc tcctgggcaa 180
ggggacgtct gcagctgatg ccgtggaggt cccagcccc gctgcggttc tcggaggtec 240
ggagcccctg atgcagtga cagcctggct gaatgcctat ttccaccagc ccgaggctat 300
cgaagagttc cccgtgccgg ctcttcacca tcccgttttc cagcaagagt cgttcaccag 360
```

```
acaggtgtta tggaaagctgc tgaaggttgt gaaattcggg gaagtgattt cttaccagca 420
attagcagcc ctggcaggca accccaaagc cgcgcgagca gtgggaggag caatgagagg 480
caatcctgtc cccatcctca tcccgtgcc aagagtggc tgcagcagcg ganccgtggg 540
caactactcc ggaggactgg ccgtgaagga atggcttctg gcccatgaag gccaccggtt 600
ggggaagcca ggcttgggag ggagctcagg tctggcaggg gcctggctca agggagcggg 660
agctacctcg ggctccccsc ctgctggccg aaactgagta tgtgcagtag gatggatgtt 720
tgagcgacac acacgtgtaa cactgcatcg gatgcggggc gtggaggcac cgctgtatta 780
aaggaagtgg cagtgtcctg ggaaaaaaaa aaaaaaaaaa aagaaaaaaaa naaa 834
```

<210> 370

<211> 947

<212> DNA

<213> Homo sapiens

<400> 370

```
tggcaataga atagctggat acactaatct ctacaagggtg tcaggcagga gattcaccgt 60
tccccagtc caggggcagg agagaaatct gtaaagggac agatgcacca tctttatttc 120
aaaaaagaaa gctccctcag attgtgttac taggagtctc ttttgtgaca ttactgasc 180
tttctcccca atcttacctt cctattggct actttttaa taaaaataaa catttttagg 240
taatattgaca aaaatgagat aaaatcttaa aaacattgta ctagtgtaca gttactaaaa 300
tgtgcttact acaaaacagt aaaatatttc actctgtaaa tcatcactaa gtagttattc 360
tgtcctgttg attatgagcc tccaaaaatg tttaatgctt gamggatggg ttgggaggca 420
gggaatcctt wtcttaaaac ractktaatg aggcataatg tacatatcat aaaacaccca 480
tktcaagtgt acatytacgt gatttttagta acttccctca gtggtgtagc tgtarctatt 540
actcagttyt agawcatktt tatcccccca ataagatctt catgctcwkt tacagttaac 600
ctgtgcttac cccagcaaca ctaatctact tctctataaa ttgcctttct ggcagtcaat 660
catggaatca tcatagtggc cgtgggtctg cttgtactag aatgtttgag gttgtcagca 720
gtacgtcttg actgtcgata tgcggggaac ggtgtgtggc cattgctgcg ggcttacatg 780
gtcatctgtc tacgactcgc gtgctatgga cgtggtcaaa ccatcgggag cgtctccgcg 840
tcgagttttg cttgtgtagg ggcactgggt cagtttggtg ggagaggccg gtccccgggg 900
aaactctgga gactttgcga gagccgctct agcgcacctt ggtggct 947
```

<210> 371

<211> 2340

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2301)

<223> n equals a,t,g, or c

<400> 371

```
ggcacagcag gaactccagg ttctgctggc cgtggcatcc tctctccarg tctgctccct 60
taccggagct asgataasgt agcatgartg acacctgaga ttagaggctg gggctcactg 120
caggctgtgg agaggatcat ctggtccaca ggaacacttg gcagtgtctt cgtagacccc 180
```

```
tcggtgatgt ggaatggaca ggtgcctcgc aagagagcaa gcacgttcat aacaaaacag 240
caacacaaag acatgtttaag catgtttatt tatttgctg tttttgtttt tttacttgag 300
ctgtggctac agctgnccag gtacctaaagc aagtcagttg ggtacagcag gacacgccac 360
cattccaggg tagctggtac cgccagaaac aggagtgggt cttgtcctgt tgcaggcaca 420
ctgcagtggg tttcctgcag ctctccaaca aacgcctgag tcacaggcca gagctgcctt 480
ggtatgttgt taagtccaaa acttcttctc tgggtacct atcttccttc atgaagcagg 540
tgctcaggac ccggaagaat catctacctc ccagctttgt gagacagaac caagtaaaag 600
gaaacatgct agaaaacgtg cctagagaag acacttcaac ctttgccctt tccaaccctt 660
cttcagagaa aggtgtccca tggcccaaaa aagaactgcc aagttttggt gaggagtaac 720
accctggcat gacattcctt ctctttcctg gccctcaacc acttccttcc tttggctctt 780
aagacctagc aggttctgtg aactctcagg ccttgccag cactagttag gggaggctag 840
gtgggtcaatg tcctgggtgat tttatgagac tgccccactg agaaaactta cttacttcag 900
gcatccagtg cccccacca gggttcaggc cctgtctaag gtgttgctta aagacaaaaa 960
ggcaacatgt gcctcactgg tgggtgtgcca ctgttctcat gctgcctcct aagtgactcc 1020
gattttcagc cctggtagaa taaggaagac agctgatgcc tccttagccc cttagcacat 1080
gttcctaagg tgtgtgttca agccaacctg aattctgcct ccctgttata gtccctgtct 1140
ccccacaga gacctgtggg tgctcccagc agagttgaga ctggctccgt tgagttaatg 1200
actagaatat agtgctttca ctacttgatt gttaacctgt tttcttctga tgccatcagt 1260
accagcagtc agactattcc actgggttaag tgtttactac cattaaagcg aggcagtaag 1320
caaagagctg agtgagtcct ctgctctcca gaggaccaag aaatacctgt gtgacacaga 1380
cccacttcag tgtgtacagc aaattctata gtgcttctga gccagcagg gctttacctg 1440
cccctggaga gttttagccg tcttgtgttt cttgtttact tcacaaccaa atttgtcccc 1500
tcttctctct gttaaggagg agaagtcact ttagctggat aatacctatg taacaaactg 1560
agcagctgtt atttgggcaa aatcaaagga agaaagagac tatggctctt tattttattgt 1620
gggaaggaaa acagggtggg gcgggtgagt gaaaagggtg aaatccctgg taccttgctt 1680
ggtggttaca cagtttaacc ataggccaat tttaggggcc tctgaagtat ctttctacaa 1740
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ctttcagaaa acattagtgg ccgctgcccc agctacagag acggccgaaa tgctttcact 1860
ccttagcttt gccaaactcca tcctccaaaa cttcccagaa tacctccctt tccagttcta 1920
ccaaatctgt acttgggagc agcctgctgg atccagaaca tgacaacaga gagctgcgtc 1980
cacagggaac aaagccctga cctctctctc cacattacc ttacaaaaaac aggccctccc 2040
catgagagag ctacacggca ggggcagaca ctgtgagtat aagctacttt cctccctgga 2100
gtgctctatg tgggcagaac atgctctcct tgctctcctt ggaagggtgc ttctctatgg 2160
cctggctaga gctgcaaaaa agggacacac ccacttcgg taaaagaaaa tagggaaagg 2220
ccataaacia agacagactt gtagtttatt ttgtattttt tttaaataaa tacactttac 2280
attaaaaaaa aaaaaaaaaa ncggggagggg tggcctaacc caaaagtga agctaaacct 2340
```

<210> 372

<211> 1575

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (58)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1548)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1556)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1559)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1565)

<223> n equals a,t,g, or c

<400> 372

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atggatttgt ggacatccta gagagtgact taaaggacct cgtcatgtac agcaagtncc 60
agcggctctt ccgctctccg tccatgccct gcagcgtgat ccggcccatc ctcaagaggc 120
tggagcggcc ccaggacagg gacacgcccg tgcagaataa gcggaggcgg aggtgacccc 180
tcctgaggag cagcaggagg ctgaggaacc taaagcccgc gtcctccgct caaaatcact 240
gtgtcacgat gagatcgaga acctcctgga cagtgaccac cgagagctga ttggagatta 300
ctctaaggcc ttctccttac agacagtaga cggaaagcac caagacctca agtacatctc 360
accagaaacg atgggtggcc tattgacggg caagttcagc aacatcgtgg ataagtttgt 420
gattgtagac tgcagatacc cctatgaata tgaaggcggg cacatcaaga ctgcggtgaa 480
cttgcctctg gaacgcgacg ccgagagctt cctactgaag agcccccaty cgccctgtag 540
cctggacaag agagtcatcc tcattttcca ctgtgaattc tcatctgagc gtgggccccg 600
catgtgccgt ttcacagggg aacgagaccg tgctgtcaac gactacccca gcctctacta 660
ccctgagatg tatatcctga aaggcggcta caaggagttc ttccctcagc acccgaactt 720
ctgtgaaccc caggactacc ggcccatgaa ccacgaggcc ttcaaggatg agctaaagac 780
cttcgcctc aagactcgca gctgggctgg ggagcggagc cggcgggagc tctgtagccg 840
gctgcaggac cagtgagggg cctgcgccag tcctgctacc tcccttgctt ttcgaggcct 900
gaagccagct gccctatggg cctgccgggc tgagggcctg ctggaggcct cagggtgctgt 960
ccatgggaaa gatggtgtgg gtgtcctgcc tgtctgcccc agcccagatt cccctgtgtc 1020
atcccatcat tttccatata ctggtgcccc ccaccctgg aagagcccag tctgttgagt 1080
tagttaagtt gggttaatac cagcttaaag gcagtatttt gtgtcctcca ggagcttctt 1140
gtttccttgt tagggttaac ccttcatctt cctgtgtcct gaaacgctcc tttgtgtgtg 1200
tgtcagctga ggctggggga gagccgtggg ccctgaggat gggtcagagc taaactcctt 1260
cctggcctga gagtcagctc tctgccctgt gtacttcccg ggccagggct gcccctaatac 1320
tctgtaggaa ccgtggtatg tctgccatgt tgcccctttc tcttttcccc tttcctgtcc 1380
caccatacga gcacctccag cctgaacaga agctcttact ctttcctatt tcagtgttac 1440
ctgtgtgctt ggtctgtttg amtttamggc ccatcttcag ggacamtttc cntwagrmrk 1500
gttttaaggg ttcccctgkt caaatatcag ttacccattc ggtcccangt ttttgntgnc 1560
ccaanaaggg gaagg                                     1575
```

<210> 373

<211> 1878

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1717)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1764)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1771)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1773)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1810)

<223> n equals a,t,g, or c

<400> 373

```
ccgccgcggt gattccatca ctcggttttc ttcccgccct gcctcgcgcc cgtagccggg 60
ctgggccaga acagcccaag atggccgact tcgatgatcg tgtgtcggat gaggagaagg 120
tacgcatagc tgctaaattc atcactcatg cacccccagg ggaatttaat gaagtattca 180
atgacgttcg gctactactt aataatgaca atctcctcag ggaaggggca gcacatgcat 240
ttgccagta taacatggat cagttcacgc ctgtgaagat agaaggatat gaagatcagg 300
tcttaattac agagcacggt gacctgggta atagcagatt tttagatcca agaaacaaaa 360
tttcctttaa atttgaccac ttacggaaag aagcaagtga ccccagcca gaagaagcag 420
atggaggctc gaagtcttgg agagaatcct gtgacagtgc tttaagagcc tatgtgaaag 480
accattattc caacggcttc tgtactgttt atgctaaaac tatcgatggg caacagacta 540
ttattgcatg tattgaaagc caccagtttc agcctaaaaa cttctggaat ggtcgttggg 600
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gccacattta atgttggtga gagagtgatc taccctaag acattttact gtttaaaaaa 1260
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<210> 374

<211> 846

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (703)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (747)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (786)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (797)

<223> n equals a,t,g, or c

<400> 374

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tctgggggaa gcttcgtgtg gacatcaagg cttacctggg ctcgccata cagctgggtg 180
cctgtctgtc ggagacgacg gtgttgggcg ccgtgctgcg gcacatcagc gtgctgggtg 240
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cgggccccag cgaagcctcc agcccttgg ctaacccct tgncccaagt catcattggc 720
tgtatcaagc tcatccccaw tgcccgnntc taaccgctg cgaatgcamt gcatccgtgg 780

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aatcct 846

<210> 375

<211> 657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (634)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (646)

<223> n equals a,t,g, or c

<400> 375

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ctcatccgaa ttggcaggaa tgagtgtgtg gttgtcatta ggggtggaaa agaaaaagga 360
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<210> 376

<211> 695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (39)

<223> n equals a,t,g, or c

<220>
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 <222> (56)
 <223> n equals a,t,g, or c

<220>
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 <222> (103)
 <223> n equals a,t,g, or c

<220>
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 <222> (647)
 <223> n equals a,t,g, or c

<220>
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 <222> (653)
 <223> n equals a,t,g, or c

<220>
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 <223> n equals a,t,g, or c

<220>
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 <222> (680)
 <223> n equals a,t,g, or c

<400> 376
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 gtaggtaaag gaaaattaca gtcaaagggg ggttgttctt tgggtgggcag gagtgggggt 240
 cacaagggtgc tcagtggggg agattttttg agccaagata agccaggaaa aggamtcca 300
 caagktaatg tcatcagtta aggcaaggac tggccatttw crcttctttt gtggtggaat 360
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 ggccatctgg gcgtrtacgt gcawgtcata ggggatgcga tggcttggtc tgggctcaga 480
 ggcctgacat tcccaaagag aatacgaagc taagtgaagg aagagatttt tttatgtttc 540
 attcctagtg ctgtgtgggc acttagcaaa taattttaga acaaataaat acactttgcc 600
 agatttaata gagaagtttt tacttactga agttggaaga tttgtangtg ttnccactcg 660
 cnccatggac agtaatgtan ggatttaaag gcagg 695

<210> 377
 <211> 3610
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 377

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tacgacggcg ttgatatcgg tggtaacgac ggcctcagca ggcggggaag atgaaagtag 300
ccggatcgag ctgggagatg tgacaccaca caatattaaa cagttgaaaa gattgaatca 360
ggtcatcttt ccagtcagct acaatgacaa gttctacaag gatgtgctgg aggttggcga 420
gctagcaaaa cttgcctatt tcaatgatat tgctgtagg gtagtatgct gtaggggtga 480
tcattcacag aatcagaaga gactttacat catgacacta ggatgtctgg caccttaccg 540
aaggctagga ataggaacta aaatgttaaa tcatgtctta aacatctgtg aaaaagatgg 600
tacttttgac aacattttatc tgcatgtcca gatcagcaat gagtcggcaa ttgacttcta 660
caggaagttt ggctttgaga ttattgagac aaagaagaac tactataaga ggatagagcc 720
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<210> 378

<211> 223

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<400> 378

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agaagttggt ctccctaatac attgaaaaac catgaattca taktgatggt ttcccaaagc 180
ccaaaccaac ccaaccaaac atgttattttg gtccctccttg gaa                                     223
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<210> 379

<211> 809

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (171)

<223> n equals a,t,g, or c

<400> 379

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gccgagcgcc ggcgttgggc agaagcacag caccctccgt aagggcaccg ngagagcccg 180
gragtgcgtt ccggggcttt cggagcagcg gtgtgaggac cagcagagag aagagattcc 240
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gagtttgata aactcttata ccagtgatat tgactgtttt aaattaacag atttatcaac 480
atctctgagc tgtgtagggc ctttaattgaa aaagtatctt tgattatttt ttcacatttt 540
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ggccacakgc cyataataat ggratattta cagtactttt tagtggagaa cttttttaag 600
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ttaacattct tctctcaatg agttttcctt taaaatttgc agtgaatttg ttttcctgtt 720
tatgcatgag aatttaggtc ttattaattg ggggaaatta atgttaaagt aataaataag 780
cccttgttgc aaacggacgc gtgggtcga 809

<210> 380

<211> 2550

<212> DNA

<213> Homo sapiens

<400> 380

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tggtctcaag gacactgcat cgtcaaatcg atccccctggc cgttggagga gcagttcatc 180
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<210> 381

<211> 1268

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1259)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1262)

<223> n equals a,t,g, or c

<400> 381

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<210> 382

<211> 854

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (794)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (807)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 382

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gcggacgcgt ggcggacgcg tgggtgctta tgaacatcca ggctccagcc ttttccctga 60
gggtcctaata gactatgtct tcagtcattct tccactccac tctcagcaac aagtgcgagc 120
ccctatcccc atggtgcccc ttggtgggat ccagatgggt cactccatgc cgccagccct 180
ttccagttta catccttcac ccacattgcc cctgccaatg gagggctttg aggagaagaa 240
aggcgcgtca ggggagtcct tctccaagga cccctatgtg ctttctaagc agcatgagaa 300
gcgaggtcct cacgctttgc agtcattctg tccrcctagc actccctcct ctctcgggt 360
gttgatgaaa cagagcactt cggaagacag cctaaacgca acagagcggg aacaggagga 420
aaatatacag acttgtacaa aagccattgc ctctctccgg attgccacgg aagaggcagc 480
tctgctcggg ccagatcagc cagcgcgggt gcaggagccc caccagaacc ccctgggaag 540
tgcacatgtt agcattagac actttagtag acctgagcca ggtcagccct gtacctcagc 600
caccaccctt gacttgcatt atggtgaaaa ggacaatttt ggtacatcac agactccatt 660
agctcactcc acgtttttaca gcaagagttg tgtgggtgac aagcagttgg rcttttcaca 720
gcagcaaggg aattttcttt caagcacagr gggaaagcaa agatccttcc ttcaggaaaa 780
gagtycagct tacnttggtc ttttggnatg ctgggngat tttccttttc ccacnttttt 840
cccccttttt tttg                                     854
```

<210> 383

<211> 1091

<212> DNA

<213> Homo sapiens

<400> 383

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gttttcagga ttgcattgtc tatgcaaaga ataaggcctg gcacatcata agcactcaaa 60
gtattatgtt tctttttccc tattctaact cagcattatt ggtgcttctt atatgacttc 120
ctctcatttt tatcagatgt gatgactgaa gccaccaca aatatgacca ctctgagggt 180
acaggatcct caagctggga tatccaaaat tctttcagaa gagagaagct ggaacaaaaa 240
tccccagatt cgaagacact acaggaagat tcacctggag tgagacaaag ggtctatgag 300
tgccaggagt gtggaaaatc cttccggcaa aaaggtagtc taacgttaca tgagagaatc 360
cacactggtc aaaagccttt tgagtgcacc cactgtggaa aaagcttcag ggccaaaggc 420
aatcttggtt cacatcaacg gatacacacg ggagagaagc cttatcagtg caaggagtgt 480
gggaaaagct tcagtcaacg aggtagtctc gctgtccacg agagactcca cactggacag 540
aaaccctacg agtgtgctat ttgtcagaga agcttcagga atcagagtaa cttgtgctgt 600
```

cacaggagag ttcacagtgg tgagaagccc tatagatgtg atcagtgtgg aaaagccttc 660
agtcagaaag gaagcttaat tggtcacatc agagtccaca caggcctgaa gccctatgcc 720
tgtacccagt gcaggaagag tttccacacc agggggaatt gtattctgca tggcaaaatc 780
cacacaggag agacacccta tctgtgcggc cagtgtggaa aaagcttcac ccagagaggg 840
agtctggctg tgcaccagcg aagctgctca cagaggctca ccctttgacc actttcctga 900
agagaagttc tctttatgaa ttaagagtac aaaatcctct gagatgaagc aacctatcca 960
gttctatgga atgaatggag aatctttcag aaagaccatc attgggtagg gcaaactgat 1020
ttttttcctt tccccaaaa gagtatgaaa aataaatgtc ttgtttatta tcattaaata 1080
aaaaaaaaa a 1091

<210> 384

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1014)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1015)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1026)

<223> n equals a,t,g, or c

<400> 384

ggcacgagct ggtcaaggcc gttccgtcag tgttttcaga cgccctggga acgcggctgc 60
agggtccggt cttcggtttg cacagctaga ggccgcgcac agcaaaggat gagcggaacc 120
ttggaaaagg tgctgtgcct gaggaacaat accattttta agcaagcctt ttctctctta 180
aggtttagaa cttcaggaga gaagcccatc tattctgtag gtggaattct actaagtatc 240
agtcggccct acaagacaaa gcccacccac ggcatctggaa agtacaagca cttaattaaa 300
gcagaagagc ccaagaagaa gaagggaaaa gtggaagtga gagccattaa tttggggaca 360
gattatgaat atgggggtttt aaatattcat ctgactgcat atgatatgac cctggcagag 420
agttatgccc agtatgttca caacctctgc aactctctct ccattaaagt cgaggaaagt 480
tatgcaatgc caacaaaac catagaagtg ttgcagttgc aggaccaagg cagcaaaatg 540
ctcctggact cagtgcctac caccatgag cgagtgggtc agatcagcgg tttgagtgtc 600
acgtttgcag aaattttctt ggaaataatc caaagcagtc ttcctgaagg agtcagactg 660
tcagtgaagg agcacactga agaagacttc aaggacgat tcaaagctcg accagaactg 720
gaagaactgt tggccaagtt gaagtagcta ctgtagaccc tttcatgcca gcagtgggtca 780
tattgagtgc caaagagaag agcttactgg gtagtttagag ttcattcagga gacccaaccc 840
ttagatttca taagtaccca ttcccatagc cagtaatgtc ctactcctc tgtggcttgg 900
ctgtacttgc catttcttac cacttaccta tgaggtaatg cttgttatct tccatctaata 960
aaaaatctgc tgcagatgtg taaaaaaaaa aaaaaaaaaa aaaaaagaaa aaannaaaaa 1020
aaaaanaag 1029

<210> 385

<211> 583
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (551)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (574)
<223> n equals a,t,g, or c

<400> 385
ccccgggtcg acccacgcgt ccgcccacgc gtccgcrcgg ccgactcgca agatggcgcc 60
gcagaaagac aggaagccca agaggtcaac ctggagggtt aatttggacc ttactcatcc 120
agtagaagat ggaatttttg attctggaaa ttttgagcaa tttctacggg agaagggttaa 180
agtcaatggc aaaactggaa atctcgggaa tgttggtcac attgaacgct tcaagaataa 240
aatcacagtt gtttctgaga aacagttctc taaaagggtat ttgaaatacc ttaccaagaa 300
ataccttaag aagaacaatc ttcgtgattg gcttcgagtg gttgcatctg acaaggagac 360
ctacgaactt cgttacttcc agattagtca agatgaagat gaatcagagt cggaggacta 420
ggcaaaggct ccccttacag ggctttgctt attaataaaa taaatgaagt atacatgaga 480
aataccaaga aattggcttt tagtttatca gtgaataaaa aatattatac tcttgaaaaa 540
aaaaaaaaa nggcggccgt tttaaagatc ctnaggggc caa 583

<210> 386
<211> 2410
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2167)
<223> n equals a,t,g, or c

<400> 386
tatacccacg cgtccgcgga cgcgtgggtc gctgggctca gcagtgaagc tgcggacctt 60
cgcgagagaac tatcctatcc ctgaaccagg cccaaatgag gtcttgctga ggatgcattc 120
tggtggaatc tgtggctcag atgtccacta ctgggagtat ggtcgaattg ggaattttat 180
tgtgaaaaag cccatggtgc tgggacatga agcttcggga acagtcgaaa aagtgggatc 240
atcggtaaaag cacctaaaac caggtgatcg tgttgccatc gagcctggtg ctccccgaga 300
aaatgatgaa ttctgcaaga tgggccgata caatctgtca ccttccatct tcttctgtgc 360
cacgcccccc gatgacggga acctctgccg gttctataag cacaatgcag cttttgttta 420
caagcttcct gacaatgtca cttttgagga aggcgccttg atcgagccac tttctgtggg 480
gatccatgcc tgcaggagag gcggagttac cctgggacac aaggctcttg tgtgtggagc 540
tgggccaatc gggatggtca ctttgctcgt ggccaaagca atgggagcag ctcaagtagt 600
ggtgactgat ctgtctgcta cccgattgtc caaagccaaag gagattgggg ctgatttagt 660
cctccagatc tccaaggaga gccctcagga aatcgccagg aaagtagaag gtcagctggg 720
gtgcaagccc gaagtcacca tcgagtgcac gggggcagag gcctccatcc aggcgggcat 780
ctacgccact cgctctggtg ggaccctcgt gcttggtggg ctgggctctg agatgaccac 840

cgtaccccta ctgcatgcag ccatccggga ggtggatata aagggcgtgt ttcgatactg 900
caacacgtgg ccagtggcga tttcgatgct tgcgtccaag tctgtgaatg taaaaccctt 960
cgtcacccat aggtttcctc tggagaaagc tctggaggcc tttgaaacat taaaaagg 1020
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ggctctgccc tcatccccac agtcttggga tctcagggca caatggctgg acatgggtgg 1140
gctctgatgc agaactttct cttttgaatg ttaagaataa ctaatacaat tcattgtgaa 1200
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tctggccctt gggtttcctg gttccactgc tactgaccca gaggggaatg agggctgagt 1440
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gccactcagg gctcgggatg aaggcttgtc agcacttcca gtttagaacg caatgtttct 1560
agagacatat tggctgtttg ttttgatgat aaaaggagaa taagaaaagg catcactttc 1620
ctggatccag gataattttt aaaccaatca aatgaaaaaa acaaacaaac aaaaaaggaa 1680
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caagtgaagg accccctccc caacatgccc caccacccc ctaagyaygg tcccttgtca 1860
ccaggcaacc aggaaactgc tacttggtga cctcaccaga gaccaggagg gtttggttag 1920
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aactaggctc atactcaatt gatggttatt agacaattcc atttctttct ggttattata 2040
aacagaaaat ctttcctctt ctcattacca gtaaaggctc ttggtatctt tctgttgtaa 2100
tgatttctat gaacttgtct tattttaatg gtgggttttt tttctggtaa gattggacct 2160
aaatcgnatc atgcaactgt gacttgrcta tctcagatga gtatgtgct catcgtggct 2220
accttatctt attgcatgtg aagtagttag agctgttctg actggacgtt ccttggcggg 2280
gttgttgggg ggggatgtgt gtgaaaaata ttcggccgtt ggggggtccg gccgctgcat 2340
ggcatcctac gcctcgtggg ggcccctttg agcgcgcggt ggcccgctct ctcggtccaa 2400
ggccgcgcgg 2410

<210> 387

<211> 689

<212> DNA

<213> Homo sapiens

<400> 387

agtaggcaga gtttaciaag gtctaggatg acatctgggtg tattgactgt ggccagtctt 60
aaagctagtt tttgctatgt ggaacatgct gctctaattc agattttaaag agtttcttcc 120
tgttaattcg aagctcactg tgcctcttgt ttccgaggga agaaggactg attaagtcac 180
ctaaatggat gcaataactga attacaggctc agaagatact gaagattact acacattact 240
gggatgtgat gaactatctt cggttgaaca aatcctggca gaattttaaag tcagagctct 300
ggaatgtcac ccagacaagc atcctgaaaa ccccaaagct gtggagactt ttcagaaact 360
gcagaaggca aaggagattc tgaccaatga agagagtcga gcccgctatg accactggcg 420
aaggagccag atgtcgtatg cattccagca gtgggaagct ttgaatgact cagtgaagac 480
ggtgggtttc tcgctgggtg cgacgtgaat ttgtgaagct caggatgccc atggattaga 540
ctcatgtagt agcttaaaga gtcattaggc gataggaggg agaaaaccaa gaagttagca 600
gagtctggat ataattcagt gtccgtaaat cccatgaaga gaagctcatc agaataaagg 660
caatgaattt gtgcyaaaaa aaaaaaaaaa 689

<210> 388

<211> 798

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<400> 388

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gctcctgccg ctcccgtgc cgcgcctcct gcggagaagg cccctgtaaa gaagaaggcg 120
gccaaaaagg ctgggggtac gcctcgtaag gcktcgggtc ccccggtgtc agagctcatc 180
accaaggctg tggccgcctc taaagagcgt aggangtttc tctggctgct ctgaaaaaag 240
cgttggtgtc cgccggctat gatgtggaga aaaacaacag ccgtatcaaa cttggtctca 300
agagcctggt gagcaagggc actctggtgc aaacgaaagg caccggtgct tctggctcct 360
ttaaactcaa caagaaggca gcctccgggg aagccaagcc caagggttaa aaggcgggcg 420
gaaccaaaacc taagaagcca gttggggcag ccaagaagcc caagaaggcg gctggcggcg 480
caactccgaa gaagagcgct aagaaaacac cgaagaaagc gaagaagccg ccgcggccac 540
tgtaaccaag aaagtggcta agagcccaaa gaaggccaag gttgcgaagc ccaagaaagc 600
tgccaaaagt gctgctaagg ctgtgaagcc caaggccgct aagcccaagg ttgtcaagcc 660
taagaagcgg cgcccaagaa gaaatagcga acgcctactt ctaaaacca aaargctctt 720
ttcagagcca ccactgatct caataaaaga gctggataat ttctttaaaa aaaaaaaaaa 780
aaaaaaaaaa aaaaaaaaaa                                     798
```

<210> 389

<211> 1691

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (436)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1575)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1651)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1664)

<223> n equals a,t,g, or c

<400> 389

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scctgggtgg tcggcctcac atgggaaggg gatgggtagt ggatgggggt tctggtgtat 120
cttgtgggcg ggtaattttg cttttgtttt tgttcacatt cttccccctc cacaagccaa 180
agtcgtttca tttggtttcc actgtgtgga ctgtgctgga gcttggcgcc tgccagaaaa 240
atttggggct aggcaagccc caggttgagc acatgggtgaa gcagagaaac tgttcttctg 300
gttcctgcac aacctcagag gggcaaaaac cctccccagg aaggaggagg gtgttcagga 360
gccagacttt tggagagaag gcagctccca gcctgctggg tgaccgccat tctgcgtgtg 420
ttccccagct gggcanggct ggaagcctta cgtatgaagc atggagaagc agccattgtc 480
cccactatgg gcagaggggg gaccggctg gcccttggg tcagactgga gccaacaccg 540
ccagccaccc cctctggctg ctggcaatgc cacagggtgcc caagaagatg gaggatccct 600
gtgccaggag ccaacctggt sttcccgagg gtcagtggc cagtgaagac agaagcgaga 660
gaataaagtt ccctgtaggt cctctgtcac ctttgggttg tgtttttcaa ttgttgacat 720
ttcagagggg accctccaga agcccagccg gcttccccca aggactcccc cttcgtggtg 780
agtggatttc cacacgtgcc tttgatttcg gacagattgg gcctcacagc caccgattca 840
gctgccaggg tccctggact ggggggttgg gttttctata gaggaggaaa ggccctccct 900
caccctgctc cccaccagc cagggcagca tgggacccag tgtctcagt ccttcaaac 960
ccacccccc cctacccta ccccaccaca ccccatccca gaggccttgc ctgggcaamc 1020
ctaagccct gtccctcgcc atacactgat gcctggcagc tagagcaaat ggctcgtgtt 1080
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tctgctagat tgcagtacta atggtagtgg tttagtgtct tcatgttaat attatttgta 1260
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acatccccan tgggantgga acacaatgct ncccaaaaac ctgnctttcc tggccttccc 1680
caacaactgg g 1691
```

<210> 390

<211> 454

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (425)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (444)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (451)

<223> n equals a,t,g, or c

<400> 390

```
gcgacggcgc tggcttgccc ggctgggaga gggcgtaagc aaaatgatgc ttcaacaccc 60
agggcaggtc tctgcctcgg aagtgagtgc ttctgccatc gtcccctgcc tgtcccctcc 120
tggtgactg gtgtttgagg attttgctaa cctgacgccc tttgtcaagg aagagctgag 180
gtttgccatc cagaacaagc acctctgcca ccggatgtcc tctgcgctgg aatcagtcac 240
tgtcagcgac agacccctcg ggggtgtccat cacaaaagcc gaggtagccc ctgaagaaga 300
tgaaaggaaa aagaggcgac gagaaagaaa taagattgca gctgcaaagt gccgaaacaa 360
gaagaaggag aagacggatg cctgcagaaa gtgagtgcct tctaacctta cccttctctc 420
gctangcctg tctttaccaa cttnatgtgg ntat 454
```

<210> 391

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (735)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (805)

<223> n equals a,t,g, or c

<400> 391

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ttcccggggtc gacccacgcg tccgggcgga aaaccgaagt tggaagtgtc tcttagcagc 120
gcgcggagaa gaacggggag ccagcatcat ggcagaacag gatgtggaaa acgatctttt 180
ggattacgat gaagaggaag agccccaggc tcctcaagag agcacaccag ctccccctaa 240
gaaagacatc aagggatcct acgtttccat ccacagctct ggcttccggg actttctgct 300
gaagccggag ctctgcggg ccacgtgga ctgtggcttt gagcatcctt ctgaggcca 360
gcatgagtgc attccccagg ccacctcggg catggacgtc ctgtgccagg ccaagtccgg 420
gatgggcaag acagcgggtc tcgtgctggc caccctacag cagattgagc ctgtcaacgg 480
acagggtgacg gtcttggtca tgtgccacac gagggagctg gccttcnaga tcagcaagga 540
```

```

atatgagcgc ttttccaagt acatgcccag cgtcaagggtg rgtcyntcgg ccagactgga 600
ccaggcgcca cttggkttct gmagctttgk tagcctcggc tctggcccar ccagcattta 660
ccaagcttgg caagggcagc tgcctttgaa ggtttgcagt ggtttttgct ccttaaaagc 720
ctgattgaat tatgncatgg ctcccagggg cctgcgccag ttcccagcct ggggctgcct 780
ttgaaatggg aaccccggga aggcncct

```

807

<210> 392

<211> 927

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (916)

<223> n equals a,t,g, or c

<400> 392

```

ctgcagcggg agctggatga ggccacggag agcaacgakg ccatggggcgc gaggtgaacg 60
cactcaagag caagctcagg cgaggaaacg agacctcttt cgttccttct agaaggtctg 120
gaggacgtag agttattgaa aatgcagatg gttctgagga ggaaacggac actcgagacg 180
cagacttcaa tggaaccaag gccagtgaat aagcaacttt ctacagtttt gcaccacggc 240
aagaaaacca aaaacaaaaa caaacaaca aaaaaaaccc aacaacaacc cagaacaaag 300
caaaacccag cagactgtac ttagcattgt ctaaattccat tctcaaattc caaatatcac 360
agacacccct cmcacaggaa acttcgcagt gatgcaccag gcgaggaaac gagacctctt 420
tcgttccttc tagaaggctc ggaggacgta gaagttattg aaaatgcaga tggttctgag 480
gaggaaacgg acactcgaga cgcagacttc aatggaacca aggccagtga ataagcaact 540
ttctacagtt ttgcaccacg gcaagaaaac caaaaaccaa aacaaacaaa caaaaaaac 600
ccaacaacaa cccagaacaa agcaaaaacc agcagactgt acttagcatt gtctaaatcc 660
attctcaaat tccaaatatc acagacaccc ctcacacaag gaatataaaa accaccaccc 720
tccagcctgg gcaacgtagt aaaaacctca tctatacaag attttaaaaa taagctgggc 780
gtggtggtac acacctgtgg tcccagctac tagggaggct gagccaggaa gaacgstyca 840
gccaggayt tcgrggctgc aatgagctat aattgcatca ttgcactcca gcctgggcaa 900
cagagaccct gttttnaacc accacca

```

927

<210> 393

<211> 1023

<212> DNA

<213> Homo sapiens

<400> 393

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cgatgctaga gcaactcttg cccccacc ccacggacgt gttgcagtga tatcagaatt 120
ttgcgtgcgg tttaccctgt tttaacctct ttgcgtctcg cttctgaatc gtatccactt 180
gagcatcact agactgatct attttaacac tgggtggggg cagcgaggac atggttttaa 240
actttaaaat gaaaatgtga aactaggaat gttgctgtga gaccttgg acaaacagat 300
ttttgcactg gggatagaac ttgagcaatt tctgtcttgg cctcgccact gacgtccctt 360
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aggaagcagg aggagcaaga gccaactgga gaagagccag ctgtgttggg aggagacaaa 480
gaaagcaciaa ggaagaggcy caggagagag gcccaggga atggaggcca ctcagcaggc 540
cctagctggc ggcacattcg ggctgagggc ctggactgca gttacacagt cctgtttggc 600
aaagctgagg cagatgagat tttccaagag ttggagaaa aagtagaata ttttacaggt 660

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ataaagatgg ctgtgaccac atcgggggagc accgagatga tgaaagagaa ctggcccctg 720
ggagcccat tgcctctgtc tccttcggtg cctgcagaga ctttgtcttc cggcataagg 780
attcccgtgg gaaaagcccc tccaggaggg tggcgggtgg caggctgccg ctggcccacg 840
ggagcttact aatgatgaac caccgacca acacgcactg gtaccacagt cttcccgtga 900
gaaagaaggt tctggctcca cgggtgaatc tgacttttcg taaaattttg cttactaaaa 960
aataaaaaaca tttttaacag ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaa 1023

<210> 394

<211> 822

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (550)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (788)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (813)

<223> n equals a,t,g, or c

<400> 394

aaaaatttta aacaaagaaa ggaaaaaaat tgacaataaa agtcactctt ctaattgaat 60
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acattcttgc agagaaagca agatccaaat tgattttggg atattaaaag ttaacagaac 180
actgaacaag gaaagaatgg catagatcta tctttacagt ctggagttaa ttcctgttaa 240
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ctttattttc cctggtagag acatcttcaa ggcataaaat agcttaaaga gcagagtaga 480
aatggaagag gctttgcaaa aggctagata actaacaaca cctgggttgg ggcggcggcc 540
tcttctcttn cagctccctt agcttggtc cgtaagtga tcacttgcca aatgctttag 600
atgattgcct ctcaataatt gaaaggtggg gtagttgta ttctaaatga tgtagaaggt 660
taaaaataat tacattatgc ttctattcta tcacttaaaa cmaatcatta aaactaattt 720
ctagctaaat kgttaattat aattatgctc agaatctatt aatgagctct gctggccttac 780
gactgcngt taagagaaat ctttacaaga ccnaggcctg aa 822

<210> 395

<211> 1702

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1694)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1696)

<223> n equals a,t,g, or c

<400> 395

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gcttcttttg tttctgatta tgttttctgc agagagacac gggctcaagg aacccaagag 60
agtggaagaa ctgcaaaaaca agattgtaaa ttgtctcaaa gaccacgtga ctttcaacaa 120
tgggggggtg aaccgccccca attatttgts caaactgttg gggaagctcc cagaacttcg 180
taccctttgc acacaggggc tacagcgcat tttctacctg aaattggaag acttggtgcc 240
accgccagca ataattgaca aacttttctt ggacacttta cttttctaag acctcctccc 300
aagcacttca aaggaactgg aatgataatg gaaactgtca agagggggca agtcacatgg 360
gcagagatag ccgtgtgagc agtctcagct caagctgccc cccattttctg taaccctcct 420
agcccccttg atccctaaag aaaacaamca aacaaacaaa aactgttgct atttcctaac 480
ctgcaggcag aacctgaaag ggcatttttg ctccggggca tcctggattt agaacatgga 540
ctacacacaa tacagtggta taaacttttt attctcagtt taaaaatcag tttgttggtc 600
agaagaaaga ttgtataaak gtataatggg aaatgtttgg ccatgcttgg ttgttgccagt 660
tcagacaaat gtaacacaca cacacataca cacacacaca cacacacaga gacacatctt 720
aaggggaccc acaagtattg cccyttaaca agacttcaaa gttttctgct gtaaagaaag 780
ctgtaatata tagtaaaact aaatgttgcg tgggtggcat gaggttgaaga aggcaaaggc 840
ttgtaaatth acccaatgca gtttggtctt ttaaattatt ttgtgcctat ttatgaataa 900
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tgctcagttaa thtattatth tgthtgagta agaaththta tattgccata thctgtagta 1440
thththctthg tatatthcta gtatggcaca tgatatgagt cactgcctth ththctatgg 1500
tgtatgacag ttagagatgc tgatththth thtgataaat thththctthg agaaagacaa 1560
ththaatgth tacaacaata aaccatgtaa atgaaaaaaa aaaaaaaa aaaaaaaa 1620
aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa 1680
aaaaaaaaa gggngnccgt th 1702
```

<210> 396

<211> 858

<212> DNA

<213> Homo sapiens

<400> 396

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cttgggcctc tgacatgact tatgtgtgtg tgtgtththg ggggtggggag ggagggagag 60
aagagggggc taaatthgat gctthtaactg atctccaaca gttgacaggt catccttgcc 120
agttgtataa ctgaaaaagg actththctac caggatagac cththtaagtg aaaatctgaa 180
ttgttctaaa tggaaagaaa aaaagtthga atctgtgccc thcattgggg acattcctct 240
aggactgtht tggggacggg tgggaatgac ccctaggcaa ggggatgaga ccgcaggagg 300
aatggcggg gaggaggcat ththgaactg ctgaggatgg ggggtgtccc thcagcggag 360
```

gccaagggag gggagcagcc tagttggtct tggagagatg ggggaaggctt tcagctgatt 420
tgcagaagtt gcccattgtg gccccagcca tcagggctgg ccgtggacgt gcccctgccc 480
actcacctgc ccgcctgccc gcccgcgcgc atagcacttg cagacctgcc tgaacgcaca 540
tgacatagca cttgccgata tgcgtgtgtc cagaagggtgc ccttggccga gcgccgaact 600
cgctcgccct ctagatgtcc aagtgccacg tgaactatgc aatttaaagg gttgaccac 660
actagacgaa actggactcg tacgactctt tttatatatt ttatacttga aatgaaatcc 720
tttgcttctt ttttaagcga atgattgctt ttaatgtttg cactgattta gttgcatgat 780
tagtcagaaa ctgccatttg aaaaaaagtt atttttatag cagcaaaaaa aaaaaaaaaa 840
rakcaaaggw tttcattt 858

<210> 397

<211> 1110

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (996)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1100)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1106)

<223> n equals a,t,g, or c

<400> 397

cggctgggct gcggaacgc ggccggtccg gttccgcggc ccaggcagag ggactctgca 60
agcaatggct gcagcgcgcc tggcaagagc ggcgcctgct gctgcgggag ccgcgctaca 120
cgctgctggt ggccgcctgc ctctgcctgg cggagggtgg catcaccttc tgggtcattc 180
acagggtggc atacacagag attgactgga aggcctacat ggccnaggta gaaggcgtca 240
tcaatggtac ctatgactat acccaactgc aggggtgacac cggaccactt gtgtaccag 300
ctggtttcgt gtacatcttt atggggttgt actatgccac cagccgaggc actgacatcc 360
gcatggccca gaacatcttt gctgtgctct acctggctac cttgctgctt gtcttcttga 420
tctatcacca gacctgcaag taacctccct tcgtcttttt ctctcatgtgc tgcgcctctt 480
accgtgtcca ctccatcttt gtgctgcggc tcttcaatga ccagtgggc atgggtgctgc 540
tcttcctcag tatcaacctc ctgctggccc agcgtgggg ctgggggtgc tgctttttca 600
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tgctgtttgc cctctgcagg tggcacagga caggggaaag tatcttgtcg ctgctgaggg 960
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ccttttcaac tccaatttca ttgggsatct ggtttcagsc gkttccttcc attaacagtt 1080
tttaagggtt gggtattttn caaaanattg 1110

<210> 398

<211> 864

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (823)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (830)

<223> n equals a,t,g, or c

<400> 398

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ggggtctcgc ggcgcgggag cgcacccgga gctgtggacg gagagtgcct ccctctggcc 120
tcagtttctc catgttgtag tagcggacat ggcccggacc ggccscgag accgccccgt 180
gcaacctcac cgccagcctg ggggcctcag cgactgggac gggaccaagg ggctcgggga 240
ttctccctgc cccgggccct ggtgcgtgac tgaccctcct gttcccagag cccccagcgc 300
argccgggat gttcgtcctg gtggaatggt tggacaccgt ccggatcccc cttgggcagt 360
ttgagaggaa gctcaacgac tccattgccc aggagctgaa caagaagttg gccaacaagg 420
tcgtgtacaa cgtgggactc tgcatttgtc tgtttgatat caccaaactg gaggatgcct 480
atgtattccc tggggatggc gcatcacaca ccaaagtcca ttttcgctgc gtggtgtttc 540
atccattcct agatgagatt ctcatggga agatcaaagg ctgcagccca gaaggagtgc 600
acgtctctct aggtctcttc gatgacattc tcatcccccc agagtcactg cagcagccag 660
ccaagtctga cgaagcggag cagggtgtgg tgtgggagta cgagacggag gaaggagcac 720
acgacctcta catggacacc ggcgaggaga tccgcttccg ggtgggtggac gagagctttg 780
ttgacacgtc cccacargg ccagytccag cagatgccac cantttccan tgargagctg 840
ccaaagaagg aggtccggtt acac 864

<210> 399

<211> 271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (251)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (263)

<223> n equals a,t,g, or c

<400> 399

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ttatgctcac agaataattt ggtgtaatgg ggcttatyaa cccaaatttc agaactttaa 120
attcatgtat ctttttctac actgatgact atactcaaag catcttactt taattatata 180
aatgtatata ctgtctttct caactggggg ttcaagagag aattaagccc aaaataaaat 240
aatttgtgtg ngcttatttt ctncattttt c 271
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<210> 400

<211> 925

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (635)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (900)

<223> n equals a,t,g, or c

<400> 400

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cgggacaggg ggtctcggcc gtcggcgtca tggtttcgcy cgtgcagctc ccgcctgaga 120
tccagctggc tcagcgccctg gcgggggaatg agcagggtgac ccgggaccgg gcggtgagga 180
agctccggaa atacatcgtc gccaggactc agcggggccgc agtggtttta cgcacgacga 240
gctgctgaag gtgtggaaag gactgtttta ttgcatgtgg atgcaggaca agccactcct 300
ccaggaagaa ttaggaagga ctatttccca gctcgttcac gcttttcaga ccacggaggc 360
gcanacctgt tccttcaggc cttctggcag accatgaatc gcgagtggac gggcattgac 420
aggctgcgct ggataaattc tacatgctca tgcggatggt cctgaacgag tccttgaagg 480
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ctgaratcct gcaccccgac agccaggccc ccaacgggtg gaagagccac ttcacgaga 600
tcttcctgga ggagctgacc aaagtgggcy ccgangsagc ttacggcaga ccagaacctg 660
gaagttcatc gacccttct gcagaatcgc tgcccggacc aaggattcct tggttttgaa 720
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caacatcact cgaggcatct ttgagacgat tgtggagcag gccccgcttg ccattgaaga 780
cctcctgaat gaactggaca cacaggatga ggaggtggcg tcggacagtg atgagtcctc 840
tganggcggt gaacgttgag acgcgctgtc ccagaagagg tctgagaagc cgccccgagn 900
ttccatctgc agggctgaac ctgag 925

<210> 401

<211> 1085

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (774)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1080)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1085)

<223> n equals a,t,g, or c

<400> 401

cggacgcgtg ggtgctgggg ctgcagmgct gcctccgaga ccgcgagggtg ggtggagcgg 60
gtcttccttg aagggtgcga taaggccggg cgaggtgcct gggatgcttc tccccctccg 120
cgaggaagag atctaattgg gtagggcggg ttagactag cctgccgagc cgccccgtgg 180
cacctgcagc ctcttgggcg ccgcgcgggc ccgcgcgaga aagttgttaa agggagcag 240
gtggttggtc ctgggggtccg aggcgcgcct ctcacgccct gcccaacaga agccgcagtc 300
ccgtgggggtc tggagacgca gtttcctggt aatgacaata aatccctgct cccccctgcct 360
cagacatcta cgcagcgaat tcgagcctgg ccttgagggt ccacaccgcg aggggaagatg 420
cgtgcgcccc ttccagagcc taagcctgga gacctgattg aratttttcg ccccttctac 480
agacactggg ccattctatgt tggcgatgga tatgtggttc atctggcccc tccaagtga 540
gtcgcaggag ctggtgcagc cagtgtcatg tccgccctga ctgacaaggc catcgtgaag 600
aaggaattgc tgtatgatgt ggccgggagt gacaagtacc aggtcaacaa caaacatgat 660
gacaagtact cgccgtgcc ctgcagcaaa atcatccagc gggcggagga gctggtgggg 720
caggaggtgc tctacaagct gaccagtga aactgcgagc actttgtgaa tganctgcgc 780
tatggagtcg ccgcagtgga ccaggtcaga gatgtcatca tcgctgcaag cgttgcagga 840
atgggcttg cagccatgag ccttattgga gtcattgtct caagaaacaa gcgacaaaag 900
caataactga aaaagactgt cctgtcagcg atgactttat acatcaaggg ggtccttgttt 960
tgctagagag tttgggggtt gggttggtga ttctattgtg atttataata aggccttattt 1020
tcacagaata aaataaagca aaacgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
ggggn 1085

<210> 402

<211> 348

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c

<400> 402
ctttcccaa cccckggsc cggggggttt gggcccggg gcccccgggc ctttccttta 60
aaggnaaaac ccttwaaggg tttggggaaa ttcccccccc ccgggggggg gccctttgcc 120
caaaggggaa aaattttccg ggggccaanc cggaaaggcc caaaaaaagg ttccccccgg 180
ggaaggaatc ccgggttgga attgttaaaa ccaaaagggg aattttgaag gccggaaatt 240
cgggttgccc cccaacttcc cccaacattc ccgggggggac ttgggggctg gaacgatgcc 300
ttgggagntc tcggcaagct tcgcaaggct gggttggtcag ctngcgca 348

<210> 403
<211> 1470
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<400> 403
tgngctcca ccgcggtgac gaccgctcta gaactagtgg atcccccggg ctgcaggaat 60
tcggcagagg cagwgccggc gtgggcggcc ggccgaggcg gaggcgcagg aagggggckg 120
cgagtcgtgc gaggtgccc ttctcactca gcattatgga tccaagcctg ttgagagaaa 180
gggagctgtt caaaaaacga gctctttcta ctctgtagt agaaaaacgt tcagcatctt 240
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caggctctaa acaaaattct gatcatagca atggatcatt taacttgaaa gctttgtcag 360
gaagctctgg atataagttt ggtgttcttg ctaagattgt gaattacatg aagacacggc 420
atcagcgagg agatacgcat cctctaacct tagatgaaat tttggatgaa acacaacatt 480
tagatattgg actcaagcag aaacaatggc taatgactga ggcttttagtc aacaatccca 540
aaattgaagt aatagatggg aagtatgctt tcaagcccaa gtacaacgtg agagataaga 600
aggccctact taggctctta gatcagcatg accagcgagg attaggagga attcttttag 660
aagacataga agaagcactg cccaattccc agaaagctgt caaggctttg ggggaccaga 720

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tactatttgt aaatcgtccc gataagaaga aaataactttt cttcaatgat aagagctgtc 780
agttttctgt ggatgaagaa ttccagaaac tgtggaggag tgtcactgta gattccatgg 840
acgaggagaa aattgaagaa tatctgaagc gacaggggtat ttcttccatg caggaatctg 900
gaccaaagaa agtggcccct attcagagaa ggaaaaagcc tgcttcacag aaaaagcgac 960
gctttaagac tcataacgaa cacttggtg gagtgtgtaa ggattactct gacattactt 1020
ccagcaaata gggaacagtt ttgccctgga acagagttac agatacaca tcaagagtgt 1080
tcttgctgat gctcggggtc tgaagactgt cttcctatct gcttcttgcg gctgaggaga 1140
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gttccctttt tcctcgtttg ttactttaga gcaagtttgc ccatagtctt gaatgcaata 1380
tttgttttatt ccaaaagaac atatttataa taaaatcact gtagaaggat taaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aggggagggg 1470
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<210> 404

<211> 2487

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<400> 404

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ttcccagact ccggcgtngt cccggccacg ctgcagcgtg ctgcaggaac aaaggaagac 120
cccgcggcgg cgcggcgcca cctccgcctg ctgctccgac ccgctcccgg cccgcggcgg 180
cggcaccagg gcgcccggct cagccttccc ggaggcctcg gcccggcctc atcgtgccgg 240
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gagactaacc agaccccggt gcccatgctg tgtagcacag gatgtggctt ttatggaaat 360
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agtggcagaa tgagcccaat ggggacagct agtggttcca acagtcctac ctcagattct 480
gcatctgtac agagagcaga cactagctta aacaactgtg aaggtgctgc tggcagcaca 540
tctgaaaaat caagaaatgt gcctgtggct gccttgccctg taactcagca aatgacagaa 600
atgagcattt caagagagga caaaataact accccgaaaa cagagggtgtc agagccagtt 660
gtcactcagc ccagtccatc agtttctcag ccagtgactt ctcagagtga agaaaaagct 720
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acagggtttg actgccgatg tggaaatttg ttttgtggac ttcaccgtta ctctgacaag 840
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gtttgggtgt ttgttacagg cagaattgga tagatacagc cctacaaatg tatatgccct 1140
cccctgaaaa aaattggatg aaaatctgca cagcaaagtg aaacacacag ataataggaa 1200
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gaccttcttt ccggtgaaac cagtatttgg cgccatatat aagcctgggt aaattgggtca 1500
tctaaagctg tcaaaataaga cattctgtga aaggtaaaca tcgaaactgg ttataagtaa 1560
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aaccatcaag ccaacaacag ggtcttgaga taacctttga agcttattgt actggcctgc 1620
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<210> 405

<211> 1256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1180)

<223> n equals a,t,g, or c

<400> 405

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gcccaccccg gtcytcgggt ctggggccgc cggcgcgggc cggagccgag caccgtcggc 540
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<210> 406

<211> 771
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (200)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (205)
 <223> n equals a,t,g, or c

<400> 406
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 ccagggacac ccaattcatc gtaatcatca tgaataatca aaaagtggta gctgtgctac 180
 tgcaagagtg caagcaagtn ctggntcagc tcttgttgga agcgccagat gtgtcggaag 240
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 aagcccgaat ctccgtgaay tcaggaaaac ttttaaaagc agagtatatt ctgagcagtc 660
 taataagcaa caatggagca acgggtacct ggctgtacag aaatgaaagt gacaagggtcc 720
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<210> 407
 <211> 2643
 <212> DNA
 <213> Homo sapiens

<400> 407
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 tcatttcagg tgcagatgac cgtcttggtta aaatatggga ttatcagaat aaaacatgtg 180
 tgcagacact ggaaggacat gcccaaaatg tgtcttggtc cagctttcat cctgagttgc 240
 caatcattat cacaggttca gaagatggaa cagtacgtat ttggcattca agcacctacc 300
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 aggaacctgc catgtccatg gatgccaatg gaaagataat ttggggccaag cattcagaag 480
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 ctaatgggag gtttgtgggtg gtgtgtgggtg atggggagta tatcatctac acagcaatgg 660
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tgt 2643

<210> 408

<211> 1646

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (55)

<223> n equals a,t,g, or c

<400> 408

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aacagcaggt gcggccatcg ccagcacat ggatgttgac aaagtgtcct tcaccggttc 180
caccgaggtg ggccacctga tccagaaagc agctggcgat tccaacctca agagagtcac 240
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cgtggagcag tgccacgaag ccctgttctt caacatgggc cagtgtgct gtgctggctc 360
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aaagcagagg aaagtgggga acccctttga gctggacacc cagcaggggc ctcaggtgga 480
caaggagcag tttgaacgag tcctaggcta catccagctt ggccagaagg agggcgcaaa 540
actcctctgt ggcggagagc gtttcgggga gcgtgggttc ttcacaaagc ctactgtctt 600

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tggtggcgtg caggatgaca tgagaattgc caaagaggag atctttgggc ctgtgcagcc 660
cctgttcaag ttcaagaaga ttgaggaggt ggttgagagg gccacaaca ccaggatatg 720
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aaaaaaaaa aaaaaaaaaa aaaaaa 1646

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<210> 409

<211> 876

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (146)

<223> n equals a,t,g, or c

<400> 409

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tcaatcccc gtcctcctac acttttctct gtgagaaaga tccacctaca acctcaggtc 180
ctcagaccra ccagcccaag aaacatctca ccaatttcaa atctggcacc cactggaaat 240
cagactgccc agctcgccc acagccactc ctggagcccc taaagctcta gcccaaggct 300
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taagtccatc cctgtttaa tcgatacggg ggctacccac tccacgttgc cttcttttca 480
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cctgaaaact cccctactct ggtgccaaact tggacaacac tcttttatgc actctttttt 600
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ttccctgact attcctggag tacagctaca tctcattgct gcccttcttc ccaatccaaa 720
gcctcctttg tgcctctaa catccccaca atatcacccc ttaccacaag acctcccttc 780
agcttaatct ctccactct aggttcccac gccgccccta atccacttg aagcagccct 840
gagaaacatc gtccattctc tctccatacc accccc 876

```

<210> 410

<211> 1850

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1848)

<223> n equals a,t,g, or c

<400> 410

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cgctatggat gatcgagagg atctggtgta ccaggcgaas ctggccgagc aggctgagcg 180
atacgacgaa atggtggagt caatgaagaa agtagcaggg atggatgtgg agctgacagt 240
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aaaaatgatt cggaatatc ggcaaattgt tgagactgag cttaaagttaa tctgttgtga 420
cattctggat gtactggaca aacacctcat tccagcagct aacactggcg agtccaaggt 480
tttctattat aaaatgaaag gggactacca caggtatctg gcagaatttg ccacaggaaa 540
cgacaggaag gaggtgcgga agaacagcct agtggcttat aaagctgcta gtgatattgc 600
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<210> 411

<211> 661

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (518)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<400> 411

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agcaaaatct tgtaaagtca ttcgcaaaaa cattgttaag aagtgccttg agctcttctc 180
tgagctggca gaagacaagg agaattacaa gaaattctat gaggcattct ctaaaaatct 240
caagcttgga atccacgaag actccactaa ccgccgccgc ctgtctgagc tgctgcgcta 300
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caaggaggtc tggarctgcc tgaggtnnag gagagaagaa gaagatggaa gagagcaagg 600
caagtttaga ccttgacgct ctgaagaatc ttagttaaag ttagaagngc atcccatagn 660
t                                                                 661
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<210> 412

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 412

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aagaagaaaa ctaagaagat caaagagaaa tacattgatc aggaagaact aaacaagacc 360
aagcctatct ggaccagaaa ccctgatgac atcaccceaagg aggagtatgg agaattctac 420
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gag 1263

<210> 413

<211> 1337

<212> DNA

<213> Homo sapiens

<400> 413

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gaatacaaca actaagaaaa ggaagtttcc agaaaagaag ttaacatgaa ctcttgaagt 1140
cacaccaggg caactcttgg aagaaatata tttgcatatt gaaaagcaca gaggatttct 1200
ttagtgtcat tgccgatttt ggctataaca gtgtctttct agccataata aaataaaaaca 1260
aaatcttgac tgcttgctca tttraaaaaa aaaaaaaaaa accccaaggg ggggccsggt 1320
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<210> 414

<211> 792

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (744)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (783)

<223> n equals a,t,g, or c

<400> 414

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aagctactaa ccagagccgg ctctttctcg agattttatt ccctcaaagt tgccccaaa 180
gttaaagcca cagctgcgcc tgcaggagca ccgccacaac ctcaggacct tgagtttacc 240
aagttaccaa atggcttggg gattgcttct ttggaaaact attctcctgt atcaagaatt 300
ggtttgttca ttaaagcagg cagtagatat gaggacttca gcaatttagg aaccacccat 360
ttgctgcgtc ttacatccag tctgacgaca aaaggagctt catctttcaa gataaccctg 420
ggaattgaag cagttggtgg caaattaagt gtgaccgcaa caagggaaaa catggcttat 480
actgtggaat gcctgcgggg tgatgttgat attctaattg agttcctgct caatgtcacc 540
acagcaccag aatttcgtcg ttgggaagta gctgacctc agcctcagct aaagattgac 600
aaagctgtgg cctttcagaa tccgcagact catgtcattg aaaatttgca tgcagcagct 660
taccggaatg ccttggtctaa tcccttgkat tgtcctgact ataggattgg aaaagtgaca 720
tcagaggagg taccaakraa actntaaaga aattggcgct agaatacttg gagcaatggc 780
agnatcaata ga 792
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<210> 415

<211> 1342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1036)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1038)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1099)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1224)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1246)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1255)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1338)

<223> n equals a,t,g, or c

<400> 415

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ccgcctcct tccccgccc gcaagctct ctgaccaccc ctcttttcta gagttctgcc 120
tcgcttcccg gcgcggtcgc agccctcagc ccacttagga taatggcgac agctgaggta 180
ctgaacattg gtaaaaaatt atatgagggt aaaacaaaag aagtctacga attgttagac 240
agtccaggaa aagtcctcct gcagtccaag gaccagatta cagcaggaaa tgcagctaga 300
aaaaaccacc tggaaggaaa agctgcaatc tcaaataaaa tcaccagttg tatttttcag 360
ttattacagg aagcaggat taaaactgcc ttcaccagaa aatgtgggga gacagctttc 420
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tcttttctca aaagaaatcc tgggtgtcaag gaaggatata agttttaccc acctaaagtg 540
gagttgtttt tcaaggatga tgccaataat gaccacaggt ggtctgagga acagctgatt 600
gctgcaaat tttgctttgc tggacttctt ataggccaga ctgaagtga tatcatgagt 660
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gtcctgggga acacctgcca tatnccaggt tatccagcct gtcctncccc ttaanaccca 1260
gacctgggga attccaggat gttgtggtcc tccccttcga ctaccagtg gtcctgggctg 1320
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<210> 416

<211> 1113

<212> DNA

<213> Homo sapiens

<400> 416

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ggcatagccc ggctcggcct gtaaagcagt ctcaagcctg ccgcaggaga agatggcggt 60
cgccgtraga actttgcagg aacagctgga aaaggccaaa gagagtctta agaacgtgga 120

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tgagaacatt cgcaagctca ccgggcgagg tccgaatgac gtgaggccca tccaagccag 180
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tggtattctca gatagtggag gaggaccccc agccaaacag agagaccttg aaggggcagt 300
cagtaggctg ggcggggagc gtcggaccag aagagaatca cgccaggaaa gcgaccgga 360
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gcgaatattt ggcttggtga tgggtaccct tcaaaaattt aaacaagaat cactgtttgc 540
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tgaacataat gccaaaataa ttaaatatat aagaactaag acaaagcccc atttgtttta 780
tattcctgga agaattgtgtc cagctaccca aaaactaata gaagagtcac agagaaaaat 840
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gaaggcgga caagaagagg gtaagggtgg tcagcgagag gaagagttgg aggagacagg 1020
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aaagaaaaga aaagaaagga aagaaaagaa aac 1113

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<210> 417

<211> 1174

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<400> 417

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gtagtaagca ttaataatgt ctttcatctt tgagtggatc tacaatggct tcagcagtgt 180
gctccagttc ctaggactgt acaagaaatc tggaaaactt gtattcttag gtttgataa 240
tgcaggcaaa accactcttc ttcacatgct caaagatgac agattgggccc aacatgttcc 300
aacactacat ccgacatcag aagagctaac aattgctgga atgaccttta caacttttga 360
tcttggtggg cagcagcaag cacgtcgcgt ttggaaaaat tatctcccag caattaatgg 420
gattgtcttt ctggtggact gtgcagatca ttctcgcctc gtggaatcca aagttgagct 480
taatgcttta atgactgatg aaacaatatc caatgtgcc aaccttatct tgggtaacaa 540
aattgacaga acagatgcaa tcagtgaaga aaaactccgt gagatatttg ggctttatgg 600
acagaccaca ggaaagggga atgtgaccct gaaggagctg aatgctcgcc ccatggaagt 660
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graaaacacg tctcaccact gtggttgatt caaaagaaag tgattctatt ttttaaagaa 1080
agcgttggtta atgtaattgg tatccctcct aactttttga gttcasaatt tacttggtca 1140
gattttctat tctttttttt ttttaaacta atga 1174

<210> 418

<211> 673

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (506)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (661)

<223> n equals a,t,g, or c

<400> 418

gtcagtcagt gcgcggccag gtacggggcg acggggccgc gggggccggcg ccgccatggc 60
gccgtgtttg atttggaatt ggagacggag gaaggcagcg agggcgaggg cgagccagag 120
ctcagccccg cggacgcatg tccccttgcc gagttgaggg cagctggcct agagcctgtg 180
ggacactatg aagagggtgt ccaggtgcga aangtgcaag gcaccaactt gggcaaaata 240
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acacgggctg agcgggaacat tctagagtca gtgaagcacc cttttattgt ggaactggcc 360
tatgccttcc agactggtgg caaamtctac ctcatccttg agtgcctcag tgggtggcgag 420
ctcttcacgc atctgggagc gagagggcat ctctctggga agatacggcc tgcttctacc 480
tggttgagat cacgctggcc ctgggncatc tccactccca gggcatcatc taccggggac 540
ctcaagcccc aggaacatca tggttcagca gccaggggcc acatcnaaac tgaccgactt 600
ttggactttt ggcaaggngt ttatttccat ggggggcgcc cttcaattga caactttttg 660
ngggcaacca ttg 673

<210> 419

<211> 2178

<212> DNA

<213> Homo sapiens

<400> 419

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aagggagaga gtgggagttt cccagcccg cagaactttcg aagttgagaa ragaaccctt 180
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ggcaggcatc tgatggtcca gaaagagccc caccagtaca gccaccgcaa ccgccattct 360
gctacccctg aggaccactg ccgccgaagc tggctcctctg actccacaga ctgagtcac 420
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gtgctgggag aagatacata tgaacgaacc ctgatggttg atggggaaag tgcaacgatt 600
atactcctgg atatgtggga aaataagggg gaaaatgaat ggctccatga cactgcatg 660
caggtcgggg acgcatacct gattgtctac tcaatcacag accgagcgag cttcgagaag 720
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aaaatcagaa ttattgatac cctgtagtgc aaaatgtcaa tttttaatgt ataatcagaa 1920
gtctgaattt ttataaaaca tatagcataa aaacttccag tactttggtt gaccttgta 1980
tgtcacagct ctgctctatt tattattatt ttgcaaaata accattttaa catttgataa 2040
agcatattta tgaacatatt tcttaataag aaaaatatcc attttattac cattttctat 2100
ctttttcaaa atatgcaagt ttttacctat atgtcttata ataaaagaaa taaaatattt 2160
gaaaaaaaaa aaaaaaaaaa 2178
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<210> 420

<211> 1884

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (283)

<223> n equals a,t,g, or c

<400> 420

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tgcagcaagg ctgtgatgag tcaagcctta aaagctacct tcagtggctt caaaaaggaa 180
cagcggcgcc tgggcattcc aaagaacccc tggctgtgga gtgagcaaca ggtatgccag 240
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caatacatta ggttttggca cagagcaggc gccctatgga atgcagacac agaattacc 540
caaaggcgcc ctcttgga gcatgtgtcc ggctccaca cccagcgtac tcagctctga 600
gcaggagttt cagatgttcc ccaagtctcg gctcagctcc gtcagcgtca cctactgctc 660
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ggccttattg catcccaaac cagcctctt gaccaggctg cctcccttgt ggcagcaacg 1500
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catgtcattt agaagttagt ttgkatatat tattataatc ttataattgt tctmagaatc 1800
ccttaacagt tgtatttaac agaaattgta tattgtaatt taaaataatt atataactgt 1860
at ttgaaata agaaaaaaaa aaaa 1884
```

<210> 421

<211> 622

<212> DNA

<213> Homo sapiens

<400> 421

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acagccagtg tccctggccag atgaaatgct gccgcaatgg ctgtgggaag gtgtcctgtg 420
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tgccctggccc tgcatctggt tccagccacac ctgccctccc ctttttcggg actctgtatt 540
ccctcttgagg ctgaccacag cttctccctt tcccaaccaa taaagtaacc actttcagca 600
aaaaaaaaaa aaacttgagg gg 622
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<210> 422

<211> 1285

<212> DNA

<213> Homo sapiens

<400> 422

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atccggcgag gggccctaaa cttaa 1285
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<210> 423

<211> 528

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (489)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (510)
<223> n equals a,t,g, or c

<400> 423
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gcagcgcgcc gcaggaccgg gccgctgagc ctgcagccgc cccgcgccgt gacctgcgac 120
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<210> 424
<211> 3118
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<400> 424
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ggccgagaga gctcggtgcc cgcccttccg ctgcgctttt tcgtcagctg gctggagcag 360
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acgggcggag acttcgggaa tccgctgagg aaattcaagc tgggtgttcct gggggagcaa 480
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caaactacaa agtggattga tgatgtcaga acagaaagag gaagtgatgt tatcatcatg 780
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<210> 425

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 425

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ctaaatttta cctcatttat taatctggtc attaaggaat atatttaata atattatgta 180
attattcttt ttatgcatga tacacctaga aaaatgcctt ttgtttctat tgatggcttt 240
gttgtttgga gctacttttg attacttatt gcagtttccc aatttagtct ttactttatc 300
taactcacia agtaaaatta actgatcaca tggcaactac tgtattttaa tagttctgga 360
aaaatgaaag tgctttttgc tgcttggtta atgggtaatg cccttgattc cttgactgta 420

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ggacatagct gatctaaagt actctgtcag ttttaccttc acccatgact gtcattagtt 480
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ataatcatcc tcaaagcctg tttttattac atgatgtgga ctgattattt tttctatcac 600
agtgttaaca gatggatttt attgtaaata caaagaaaac atattgatta ttgtagtatt 660
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caagaagaca agcatctgtg gtgcggaggc aagcaggcta actaggagtt gacaagctaa 1260
gaaagtgaag ctgttctttt ttagttaact gtctttctct ggagctctgt tattttgagt 1320
ataatatttc cacgacactt agtaaagcga agctaaaatg taataataat aaattgtatt 1380
ggagaaacct aaaaaaaaaa ttttttaaaa 1410

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<210> 426

<211> 1422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 426

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agaagcatga gcctttctga ctgtctacat gttcttgccc agttttaact tctagtcagt 120
gcgaatgatc gcaggagagc acagactgga ccctgctacg atctctcttg gagtggatca 180
gactgatgat caccaacaac caactcattc ccggataagg aagaagagag tgtcacctac 240
ttcagtgtgg tttcaaccct acttctgcat cttaaagaca ctgtatgggt tcagcagtag 300
tgccctgttt cattagtccc cctgatgntt tcattcctca tctcatcttt ttcttagcag 360
cattcaatga atccttcatt ctagaaacac tctatatctt tgggtttcat grgaccattc 420
tcaccttgtt ttgtcctgtg acttttttga aaaaaacaaa aacaaaaaac ctttttttnc 480
tttttaaaat ctggtaaaaa acacaatgaa aatttgctat cttaaccatg ttgaaatgtg 540
cagttagtaa agtacattca cattgtgggt caagccatca ctaccatcca tctactagaac 600
ccttttcac ttgcagatct gaaactctac ccattaaacr acttcccatc ttcccatccc 660
cacagctcct agcaaccaac attctacttt ctctatcagt ttgactactc taggtacctc 720
atatgagtag aatcatacag catttatcct tctctgcctg gcttatttca cttgtataat 780
gtccycaagg ttcatctcat ttgtagcatg catcagaact tcctcccttt ttaaaggctg 840
gataatatcc catggtatgt ttagatcaca ttctgtttat ccattcatcc atcagtgaac 900
acttgtgctc cttccaactt tgggctgttg ggtgtcctgc cactgttgct cctagtgtct 960
aatctcgttt attccctcct aatcaagtgt acaacgttgg acactgtgca ggatgatgcc 1020

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acttcatctt ggatgctaatt ctgccatggt gacttctgat taaccccagg cccaggaatg 1080
cctcaagatt tctactttac ttactgttgc ttgtgtaagc caagacaacc ttgatgttat 1140
cataaacatg tacttaccta agtcctgtcc tttggcaaat tatgggctat gagacacagc 1200
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cctgtcttgt tgccacatgt ttctaaactt tccaataaat caccttctac tgacaaaaaa 1380
aaaaaaaaaa aaactcgagg tcgacggtat cgataagctt ga 1422

<210> 427

<211> 830

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (686)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (809)

<223> n equals a,t,g, or c

<400> 427

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acgccggctt ctgttccgca gatgggggtt gttaaagttg ttaagaataa ggcctacttt 120
aagagatacc aagtgaatt tagaagacga cgagagggtg aaactgatta ttatgctcgg 180
aaacgcttg tgatacaaga taaaaataaa tacaacacac ccaaatacag gatgatagtt 240
cgtgtgacaa acagagatat cttttgtcag attgcttatg cccgtataga ggggatatg 300
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ggcatggaca agatctatga aggccaagtg gaggtgactg gtgatgaata caatgtggaa 480
agcattgatg gtcagccagg tgccttcacc tgctatttg atgcaggcct tgccagaact 540
accactggca ataaagtttt tggtgccctg aarggagctg tggatggagg cttgkctatc 600
cctyacagta ccaaacgatt ccctggktat gawtctgaaa gcaaggaatt taatgcagaa 660
gtacatcgga agcacatyat gggccnagaa tggttgcaga ttacatgcgc tacttaatgg 720
gaagaagatg aagatgctta ccaggaacag gttctyttca atwccttaaa gnacagcgta 780
acttccagac catgatggga ggagatgtnt taagaaaagc ttaatgctgg 830

<210> 428

<211> 1622

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (76)

<223> n equals a,t,g, or c

<400> 428

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gttttgacat ggtacctatc ctttcttccc ttttcaaaag attcgctata gagtctttct 180
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ggcccccccg gttccggcgc ggttgaggcc ttcgggtggtg aacgagtctc cagcaccatg 300
tctggtttgt ctggcccacc agcccggcgc ggcccttttc cgtagcggtt gctgcttttg 360
ttcctgctcg gccccagatt ggtccttgcc atctccttcc atctgcccac taactctcgc 420
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gaccagtctg ggggcgctgg cggcctgcgc agcacctcaa gatcacagat tctgctggcc 540
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atgacatggt tgaagtgtgt tttgagagca agggaacagg gcggatacct gaccaactcg 660
tgatcctaga catgaagcat ggagtggagg cgaaaaatta cgaagagatt gcaaaagttg 720
agaagctcaa accattagag gtagagctgc gacgcctaga agacctttca gaatctattg 780
ttaatgattt tgcctacatg aagaagagag aagaggagat gcgtgatacc aacgagtcaa 840
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gatctctttt ggtgtgggag gacatggggt accacctaca cccaacaagt caatgaggga 1140
cttcttttta atttggtagg attttgactg gttttgcaac aataggtcta ttattagagg 1200
cacctatgac aaaaaatagg ggttacctag ataatgccaa agtcagcatt tgtcctgggt 1260
tcccttggtg gatctgtttg gactatgttt tcttttcttc tcccacttgc tcagcagctt 1320
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atgtttacat agcttctggt gatatctttt catgatttta aatctcttaa aatggtgatg 1500
gatgtgacac ctcataaaag tgagcttttg actgtagata actcttaaag aaaatgtcat 1560
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aa
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<210> 429

<211> 548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<400> 429

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aaggagggtga agagaacaga gaaagagatt tccattttctg ctgccagagc tggatattgc 180
ctgcctgatt ctctgtgttt cctgtttcac cgccaccctt tcaggagaga actacaccag 240
ttcatcatga gggtcaggga agcaaaagct ctcagatgtg tccagggcgt tacttaagaa 300
atgagtatgc agattctgga aggggtgtgg aaaagggtgat cttttacccc caccaggaa 360
aacctgcatt gtgctagcat ggaanaatca tgggctttgg aattaaacct atttgggtgga 420
attaaaccca tttggtttca aatcccagtt atnacatctg ttaactttgc aaactcacia 480
aaattatttg aaattatctg agttttcatt tntcacctt ccagaatggg gataatgcct 540
cctgcatc 548
```

<210> 430

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<400> 430

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ccccgcctt cgccgcttc tgtgggagca agaagcccga gcccgctctg gccacaggca 60
gccgcatggt cctgcgcttc tactcagata actcgggtcca gcgaaagggc ttccaggcct 120
cccacgccac agagtgcggg ggccagggtac gggcagacgt gaagaccaag gacctttact 180
cccacgcccc gtttggcgac aacaactacc ctgggggtgt ggactgtgag tgggtcattg 240
tggtgagga aggctacggc gtggagctcg tgttccagac ctttgagggtg gaggaggaga 300
ccgactgcgg ctatgactac atggagctct tcgacggcta cgacagcaca gccccaggc 360
tggggcgcta ctgtggctca nggcctcctg aggaggtgta ctggcgaggga gattctgctg 420
tragtcactc gataaccat accaaaaaag gtttccacct gcgatacacc agcaccaagt 480
tccaggacac acttcacagc aggaaatgac cactggcttr acaagggccg ggactggamc 540
ctgktgcctt tgnccgctaa actggataa 569
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<210> 431

<211> 549

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 431

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agctgatttg atcgaggagc gcggttaccg gacgggctgg gtctatgggc gctccgcggg 180
ccgctccgcc ggctgggtgct tttttatcag ggcaagctgt gttccatggc agggaaacttt 240
tggcagagct ccactatatt gcaatggatt ttggataaac aagatctgtt gaaggagcgc 300
caaaaggatt taaagtttct ctcaaggaa gaattattgga agttacaaat attttttaca 360
aatgttatcc aagcattagg tgaacatctt aaattaagac aacaagttat tgccactgct 420
acggtatatt tcaagagatt ctatgccagg tattctctga aaagtataga tcctgtatta 480
atggctccta catgtgtgtt tttggcatcc aaagtagang gaaaaaaaaat tttttttttt 540
ngggggggg 549
```

<210> 432

<211> 1221

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1160)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1183)

<223> n equals a,t,g, or c

<400> 432

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tggggcctcg cggctccaga gccagcatg gcttcctcgc gagcctcttc cacggcaacc 120
aaaactaaag caccgcagca cttagtgtgct ccggtcgtga agaaaccaca catctattat 180
ggaagtgttg aagagaagga gagggagcgt ctggccaaag gagagtctgg gattttgggg 240
aaagacggac ttaaagcagg gatcgaagct ggaaatatta atataacctc tggagaagtg 300
tttgaaattg aagagcatat cagcgcgcga caggcagaag tattggctga gtttgagaga 360
aggaagcgag ccggcagat caatgtttcc acagatgact cagagggtcaa agcttgccctt 420
agagccttgg gggaacccat cacacttttt ggagagggtc ctgctgaaag aagagaaagg 480
ttaagaaata tcctctcagt tgtcgggtact gatgccttga aaaagaccaa aaaggatgat 540
gagaagtcta aaaagtccaa agaagagtat cagcaaacct ggtatcatga aggaccaa 600
agcttgaagg tggcaagact atggattgct aattattcgt tgcccagggc aatgaaacgc 660
ttggaagagg cccgactcca taaggagatt cctgagacaa caaggacctc ccagatgcaa 720
gagctgcaca agtctctccg gtctttgaaat aatttttgca gtcagattgg ggatgatcgg 780
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```

cctatctcct actgtcactt tagtcccaat tccaagatgc tggccacagc ttgttggagt 840
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aacacaaatg taggagcaat tgtattccat cccaaatcca ctgtctcctt ggacccaaaa 960
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tccccaggac ctcaagtaaaa atctggcatt agggccatgc gcatgggctc acaccttaag 1140
ggctgaaggc aggagaattn gcttaaaccg ggggaaatgg gangttgtgg tgagccgaga 1200
ttgcacactg cactcccage t 1221

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<210> 433

<211> 1115

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<400> 433

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acgttkccca ggctgatctc gaacctctgg gctcaagcaa ttcactcgcc tcggcctccc 120
aaaatgctgg gattacaggc ctgagccact gcgcccagcc aggatttgaa ttattttaac 180
tcatccatgg gctgccctag aatgtcacia atgaggggtg tttaatgcct ttcttatagc 240
tgctactgga acactattat gacctaattt atgagccatc cttactcatc tacaagtgtc 300
gaagcaatgt tacatacttt tttgctaaac tcagattttt tagcctaatt tcttgctctc 360
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ccatgcttca gggatatagc gttggtggac agcctcaggt cttgggggca ctatagccac 480
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ttaacaactg acaagacacc agccatacgc ctgctcttcc aacagtgggt tctagctttg 720
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ttgttcctag atatatagct ctgatttttag gccttttgtg cataccatta caatatggtg 1020
gggtaagaca ttctacagta gcctgtgctg aactgatctc ttaaataaac ttgcttctgg 1080
ttaactaaaa aaaaaaaaaa agggcggygc ctcta 1115

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<210> 434

<211> 1604

<212> DNA

<213> Homo sapiens

<400> 434

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gtgacctcct tccagatata aggcagttag tgtaaacctg ccacctccag ccctgatcca 180
ttctcaccta gcggctacag gaagctgtgt ctgttcgatt tgggtggagg agatgtgcag 240
ggagctgtat cttgtcctcc gcttgtgaaa aactcaagga tgtggagaag agtagaccgt 300

```

```

ggaaccctgc tcttctgcag ccaagctgag gggcaggatg cgtgtgggac agtggtagag 360
aagcagggga tagactcata ggctgcaaca aaggtagactc tgtccctgga cactgcctcc 420
gtactttctc cttgcttcac tggccacagc atctccctcc agccctcgct atgtgcctct 480
gccatcttca cccatcatgg agcagagggtg aggagaggca gcctgggaat atggagacca 540
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aaaggccagg agcaccctaa gaggaggagg ggcagccagc ctccattgac ggcgagcctc 660
cagccctctc ctactttgat caccatttct ctccaggctt tctgcctccg agatgtggca 720
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```

<210> 435

<211> 301

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (277)

<223> n equals a,t,g, or c

<400> 435

```

gaggcgtga acgagcagct ttctagcgag cgcagcaacc tggcccagggt gatccgccag 60
gagttcgagg accggctggc agcctctgag gaggagacgc ggcaggccaa ggccgagctg 120
gccacgctgc aggcccgcca gcagctggag ctggaggagg tgcaccggag ggtgaagaca 180
gccctcgcgga ggaaggagga ggccgtgagc agcctccgga cacaacatga ggtgagttcc 240
tgtggccagc cctgctggac ctcggggctg ggancangcc tgaccctgtg ggtgtgctgc 300
a 301

```

<210> 436

<211> 318

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<400> 436

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aattcggcac gaggaacccc ttagtcctgg ccatttcaaa agcatcacac agaagaagac 60
cttgatattt acattttaagt cacatatgca gctactgaca cttactagtg ctgttatagt 120
cctggctatt attccatgag gtcgtcacat tttaaccttt tgcataagcc tccaacggcc 180
tgatggaatg atgaagcctc agaacagttt ctacacaatg gctaagggat gtacccattt 240
tnaattttcc tcttttctgt gatcacagag ggtgaatacg ctttggccgg atacacagaa 300
gtgaaaactg tcacccat                                     318
```

<210> 437

<211> 1882

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1795)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1818)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1826)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1855)

<223> n equals a,t,g, or c

<400> 437

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tagcccgtcg ggagcgccag gccggccagg cctgcgccgy cgccgccgcc gccgtcgccg 60
ccgcgccgac catgtcgmag ccaaggagaa cccgtgcagg aaattccagg ccaacatctt 120
```

```

caacaagagc aagtgtcaga actgcttcaa gccccgcgag tcgcatctgc tcaacgacga 180
ggacctgacg caggcaaaac ccatttatgg cggttggctg ctccctggctc cagatgggac 240
cgactttgac aaccagtgac accggtctcg gaaatggcag cgacggttct tcatccttta 300
cgagcacggs ctcttgcgct acgccctgga tgagatgccc acgacccttc ctcaaggcac 360
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ctccctgtgt attctgacgc ctgagaagga gcatttcacg cgggaggaga ccaaggagat 480
cgtcartggg tggctggaga tgctcatggt ctatccccgg accaacaagc agaatcagaa 540
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cgctccaaga cctttgactg ggctgagttc cgtcccatcc agcaggccct ggctcaggag 1740
cgggtggggc gcgtggggcc tgctgacacc cacgagcccc tgcgccctga ggnngnasctg 1800
gggaagctgg agcgggancc tgacnngaag cgggaggagc gccncaagcg cttcnnggatg 1860
ctcgacgcca cagaacgggc ca 1882

```

<210> 438

<211> 2056

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2053)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2054)

<223> n equals a,t,g, or c

<400> 438

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gattcagctt aaccctgat cttcttaagt taaaggctact tttgttttat aaaagctcta 60
gataaaactt tcttttctga tcatgaatca agtatctgtg gtttcatgcc cctctctata 120
cctttcaaaag aactcctgaa gcaacttaac tcatcatttc agcctctgag tagaggtaaa 180
acctatgtgt acttctgttt atgatccata ttgatattta tgacatgaac acagaatagt 240
accttacatt tgctaaacag acagttaata tcaaaccctt tcaatattct gggaacccag 300
ggaagttttt aaaaatgtca ttactttcaa aggaacagaa gtagttaacc aaactaacia 360
gcaaaacctg aggtttacct agtgacacca aattatcggg attttaactg aatttaccca 420
ttgactaaga atgaaccaga tttgggtggg gttttgtttc tatgcaaact ggacacaaat 480
tacaacagta aattttttta taagtgttc tcccttctcc atgatgtgac ttccggagat 540
aaaggattca aaagataaag acaaagtacg ctacagagttg ttaaccagaa agtcctggct 600
gtggttgtag aaacactgtt ggaagaaaag agatgactaa gtcaagtgtc tgccttatca 660
aaagagcaaa aatgcctctg gttttgtgtt tgggagaaaa atatcttggg cgcactgttt 720
tccttgataa aagtcattct ctctactgtg tgaaatgaat acttggaatt ctaattgttt 780
tgtgtgccag gggcagtaat gtccctgcct cttctcccaa tcaagggtga ggagtggggc 840
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aatcaatacg cactttcaga tattcttatt tttattctct taagtcttta ttaactttgg 1740
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gataaagaac agaaaacatt tcaatatatt actaataact ttttccaata taaatcctaa 1860
aattcctata acatagtatt ttacagtttt atgaagcttt ctattgtgac ttttatggaa 1920
ttaagagatg aagaagatga gatattttag catttatatt tttcaaaatt atatgtatac 1980
ttaaaaataa agtaacttta tgcatttaaa aaaaaaaaaa agggsgggcc gtttttagagg 2040
atccangttt acnncc 2056
```

<210> 439

<211> 721

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (688)

<223> n equals a,t,g, or c

<400> 439

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ggcggcgagg rcaggtcgga gctcggagct gctgcttctg gttctcttgt ggccgccgct 60
gctgtccggc tgccctgggg tgccgaacag acaaggcgtg ggccacagca cctcagaagc 120
cgacgcagct cgacgcaggg gccggcagga ggggtgggca tcgcgtgtcg gagggcgccg 180
```

```

cgcgggcagg cgggcgggcg ccagaggggg aaagaggcgg gggcggcggg tcagccgctg 240
gccggggccg cgggggaatg tcgatgcccg acgcgatgcc gctgcccggg gtcggggagg 300
agctgaagca ggccaaggag atcgaggacg ccgagaagta ctccctcatg gccaccgtca 360
ccaaggcgcc caagaagcaa atccagtttg ctgatgacat gcaggagttc accaaattcc 420
ccacaaaaac tggccgaaga tctttgtctc gctcgatctc acagtcctcc actgacagct 480
acagttcagc tgcacccctac acagatagct ctgatgatga ggtttctccc cgagagaagc 540
agcaaaccac ctccaagggc agcagcaatt tctgtgtgaa gaacatcaag caggcagaat 600
ttggacgccg ggagattgag attgcagagc aagacatgtc tgctctgatt tcaactcagga 660
aacgtgctca gggggaraag cccttggnrg gtgstaanaat akkgggyttg acacattaca 720
g 721

```

<210> 440

<211> 1041

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1025)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1030)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1039)

<223> n equals a,t,g, or c

<400> 440

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ctcgtgcgcg gacattgtca gctgcgtttc cgcggtcgcg gttgaggagc tcaagcttgg 60
gaaaatggtg tgcattcctt gtatcgatcat tccagttctg ctctggatct acaaaaaatt 120
cctggagcca tatatatacc ctctggtttc ccccttcggt agtcgtatat ggcctaagaa 180
agcaatacaa gaatccaatg atacaaacaa aggcaaagta aactttaagg gtgcagacat 240
gaatggatta ccaacaaaag gaccaacaga aatctgtgat aaaaagaaag actaaagaaa 300
ttttcctaaa ggaccccatc atttaaaaaa tggacctgat aatatgaagc atcttccttg 360
taattgtctc tgaccttttt atctgagacc ggaattcagg ataggagtct agatatttac 420
ctgatactaa tcaggaaata tatgatatcc gtatttaaaa tgtagttagt tatatttaat 480
gacctcattc ctaagttcct ttttcgttaa tgtagctttc atttctgtta ttgctgtttg 540
aataatatga ttaaatagaa ggtttggtgcc agtagacatt atgttactaa atcagcactt 600
taaaatcttt ggttctctaa ttcatatgaa tttgctgttt gctctaattt ctttgggctc 660
ttctaatttg agtggagtac aattttgttg tgaaacagtc cagtgaact gtgcagggaa 720
atgaaggtag aattttggga ggtaataatg atgtgaaaca taaagattta ataattactg 780
tccaacacag tggagcagct tgtccacaaa tatagtaatt actatttatt gctctaagga 840
agattaaaaa aagatagggg aaagggggaa acttctttga aaaatgaaac atctgttaca 900
ttaatgtcta attataaaat tttaatccct actgcatttc ttctgttcct acaaatgtat 960
taaacattca gtttaactgg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaaancccn ggggggggnc c 1041

```

<210> 441
<211> 1995
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1957)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1992)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1995)
<223> n equals a,t,g, or c

<400> 441
gcccacgcgt cgcgccacgc gtccgcagca tcaccatgtc tgttcgatac agctcaagca 60
agcactactc ttcctcccgc agtggaggag gaggaggagg aggaggatgt ggaggaggag 120
gaggagtgtc atccctaaga atttctagca gcaaaggctc ccttggtgga ggatttagct 180
cagggggggt cagtgggtggc tcttttagcc gtgggagctc tgggtggggc tgctttgggg 240
gtcatcagg tggttatgga ggattaggag gttttggtgg aggtagcttt cgtggaagct 300
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aatcaaaacta tgagctggaa ggcaaaatca aggagtggta tgaaaagcat ggcaactcac 600
atcaggggga gcctcgtgac tacagcaaat actacaaaac catcgaatgac cttaaaaatc 660
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gcgagtccttc atctaaggga ccaagggtcag cagaaactag ctggggtaat cagaattagt 1860
tttaacttcc tgtgatggtt tttttgcgct ttaactctag agttgtttta aaaaattaaa 1920
aatcttagag cggttccggtt gcattgttca caactantct taacaccagc cgtgaaaatg 1980
gctgatcaaa tncan 1995

<210> 442

<211> 1723

<212> DNA

<213> Homo sapiens

<400> 442

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cgccgtcccg cagctgctgt ttccggagtt gccccttccc catgttccgg ggcaggagtc 180
cgcaaagcga agatccgccc gccggttcct catcatgtcc gaactgacta aagagctgat 240
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gacgcaagggt tttgtgttta gtgaatcaga gggatctgca ttagaacagt ttgaagggtg 360
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tcatgcatta attcaaaaaa gatcggttcag aagtttacca gaattaaaag atgctgtctt 720
ggaccagtat tcaatgtggg gaaataaaatt tggagtattg ctttttctgt attctgtatt 780
actgacaaag ggcattgaaa acataaaaaa cgaaattgaa gatgcaagtg aacccttgat 840
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tgaagatccc atgctacaga cagatgacac tcctattaaa cgctgtctgc aaaccaaag 1500
gccatacatt gagttactct ggaccacaga tcgctctcct tcaactaaat aatttgtcta 1560
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<210> 443

<211> 1899

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (327)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1878)

<223> n equals a,t,g, or c

<400> 443

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tgtattacta gtaatgtccc gctggagagg ccaccgctgt gcagtgtcat gttccagaaa 480
ttactgatga agcagcatgt gttggtggca tgtgcactgg cctgccatga cagccctctg 540
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ttcagaacta cgacttgaat gtgatcgatt acaataaatg tttttctaaa aagccaaaaa 1860
aaaaaaaaaa aaaccccngg gggggcccg gttaccaattc 1899
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<210> 444

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (413)

<223> n equals a,t,g, or c

<400> 444

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actacaaaaa ggagtgctga agccaatcac catgtaagca agataaaagc aaaggggggc 60
ttgcctgccc atctctgttc catacattct taccaggcac tgagagtcac ggggagttta 120
agactccatc ccacatactc cttttgaaac tgggtccagtg tacaacatcc agtgaagagt 180
ataggatggc atagacttac caactcaaag aatggaagga ttctagaaac attatagtcc 240
aacctcctca attcatcggt gatacacaaa ggcccactaa gctgtgtggt tcactcagca 300
tcacgtggct aatatgatat gaagccacac tagcttgtcc tcagctgtgc caagaatgag 360
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tagggcagtg                                     430
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<210> 445

<211> 2153

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (166)

<223> n equals a,t,g, or c

<400> 445

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taggaacttc agaccagatt gttccagagt accaggagga cagtgnacat tagttccttc 180
ttctgctaata ccccaaaacc tcagaaacct cataattctt aacacctggc atttccattt 240
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agctgctgaa ctcggcattg ygcctcctct tctctgttgg gatgagtgc tttattgatt 360
tgagcagcat atgctgtgat tggctgccct gcaaatttgt ttcccttaag gaaccctcac 420
caactatctc tgctggattt gggagtcccg catcttttgt ggagggcaga gtatggacat 480
cttacacccg gtggtcaagt gtgtaataaa cttgagcatt cgaatgggag aaaaagcaaa 540
tcgcacaatg acatattttg agtaataacc gtatttttca cagggtgaca aattgggcca 600
ataaatctgc catctttgaa ctcatctttg gtggctagac tgctacggca gcttctctga 660
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caaaagattc catctcccaa cgatttcaga actctgagct cagagagact ccagatttta 960
aaaaataatt tgagtgcctt gaaactatta gctttttaag ttcccttcaa atatgttagt 1020
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aaagataagg aggctccac ccacctctcc caagagcaga cattaacat ctttgtgctt 1140
tgaagagagt gaattttgga tagtcttggt attctcagac taacttcag aattatactt 1200
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atggagctta atggagaaat tgcaactttc attaaaaaac aaattcagat gaaatatcag 1560
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tttgagaaat ggcacaaaaa caggcagtc tctttaaggg ctatgcctag gcaaactact 1680
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tgtacatacg tgtatatatg tgaacagtga gatggccgtt tctgacttgt agagaaattt 2100
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```

<210> 446

<211> 492

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (305)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 446

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tcatcaatgc cctcaagacg gagcgggacg tcagcgtgcg gcagcgggcg gctgacctcc 120
yctacgccat gtgtgaccgg agcaatgcc a gcagatcgt gtcggagatg ctgcgggtacc 180
tgagagcggc agactacgcc atccgcgagg agatcgtcct gaaggtggcc atcctggccg 240
agaagtacgc cgtggactac agctggtacg tggacaccat cctcaacctc atccgcattg 300
cgggncgact acgtgagtra ggaggtgtgg taccgtgtgc tacagatcgt caccaaccgt 360
gatgacgtcc agggctatgc ccgcaagccc gtctcccgtc acctgtgtga gctgctggca 420
cagcagttct gagccctgga ctctgccccg ggggatgtgg ccggcactgg gcannccctt 480
ggacttgang ca          492

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<210> 447

<211> 1539

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c

<400> 447
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ccggggcaaac tagacattgt aatgcataag atgcaggaaa aagtgcagag cattaactat 120
aacccttttg accagaaact ttatgtctat aacgatgggt accttctgaa ttatgatctt 180
tctgtcttgc agaagcccca gtaagctggt taggagttag ggtgaaagag aaaatgtttg 240
ttgaaaaaat agtcttctcc acttacttag atatctgcag ggggtgtctaa aagtgtgttc 300
attttgcagc aatgttttag tgcatagtgc taccacacta gagatctagg acatttgtct 360
tgatttggtg agttctcttg ggaatcatct gcctcttcag gcgcattttg caataaagtc 420
tgtctagggg gggattgtca gaggtctagg ggcactgtgg gcctagtga ggcctactgtg 480
aggaggcttc actagaagcc ttaaattagg aattaaggaa cttaaaactc agtatggcgt 540
ctagggattc tttgtacagg aaatattgcc caatgactag tcctcatcca tgtagcacca 600
ctaattcttc catgcctgga agaaacctgg ggacttagtt aggtagatta atatctggag 660
ctcctcgagg gaccaaactc ccaacttttt tttcccctca ctacacctg gaatgatgct 720
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggcgggcc 1539

<210> 448
<211> 3983
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (227)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1010)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3067)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3255)

<223> n equals a,t,g, or c

<400> 448

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aaaaaaaaa aaaaaaaaaa aaa 3983

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<211> 1177
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c

<400> 449
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taagcagggg agtgtctcca aaggtcagga cttatgtttt tctgttgagt gctatatgtg 180
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gaaaacatta aaagattatc tctttttaag atggaggaaa aaaagtgaac aaagctaatt 360
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<210> 450
<211> 2428
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2009)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2037)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2343)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2348)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2375)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2387)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2420)

<223> n equals a,t,g, or c

<400> 450

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<210> 451

<211> 2485

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (222)

<223> n equals a,t,g, or c

<400> 451

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cagctggttc gaaaattagg ccgaggtaaa tacagtgaag tatttgaagc catcaacatc 180
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cattgtaaaa gaccctgtgt cacgaacccc cgcttgggtt tttgaacacg taaacaacac 360
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<210> 452

<211> 963

<212> DNA

<213> Homo sapiens

<400> 452

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ataatgaagg aagaaaacac aggagccgga gcagaagcaa agaggaaga agacatgaat 360
ccaaagataa atcctctaag aacataagt ctgaggaaca taatgacaaa gaacattctt 420
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gaagttaaag ccggactcca agtccacctc cttcagagg cagaaacaca gcaatggatg 840
cacaggaagc tttagctaga agagaaagac cgggggtctc cttattgtt tgcccaggct 900
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agc 963
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<210> 453

<211> 604

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (540)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<400> 453

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atccagaaca ctcatatgag tttaagcatt ccagaccaaa gaagccacgg agtctaagaa 180
tttatgaatc tcatgtggga atttcttccc atgaaggaaa agtagcttct tataaacatt 240
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caatcatgga gcatgcttac tatgccagct ttggttacca aatcacaagc ttctttgcag 360
cttccagccg ttatggaaca cctgaagagc tacaagaact ggtagacaca gctcattyca 420
tggttatcat agtcctctta gatgtggtac aagcscatgc ttcaaaaaat tccagcagat 480
gggattggaa tatggtttgg atgggggaca gattccnggt taattttcca ttcttgggan 540
cctagaaggg gactccatgg atctttnggg ggatagccag aattgtttgg ccncaatccc 600
cagt 604
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<210> 454

<211> 1917

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1256)

<223> n equals a,t,g, or c

<400> 454

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cttgccagat ccctccctct gtagacaacc accaacctct gtttgctgtt gaattctctc 480
ctcacattac ccagggtctgc tcaagacatg attttggttt tggttcttga gggttctagt 540
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gggcagaagg ttggagggac acttatgagg gtggccgggg gtctgacgct gcacttttga 600
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acattctgga agttttctca ggctttggac acttctgggg atggaggtgt ggagaagtgg 720
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<210> 455

<211> 1538

<212> DNA

<213> Homo sapiens

<400> 455

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tccaatttga tgtgaagttt tgggtcccaac acatttcctt cattcttgtt ggaataatca 1200
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cccgtgtgga tatgaggctg gtgtagaggc ggagaggagc caagaaacta aagggtgaaaa 1380
atacactgga actctggggc aagasatgtc tatggtagct gagccaaaca cgtaggattt 1440
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cagagactgt aaaaaaaaaa aaaaaaaaaa gggcggcc 1538

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<210> 456

<211> 2189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<400> 456

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aaacctttta tctcctaaaa aaaaaaaaaa 2189

<210> 457

<211> 1399

<212> DNA

<213> Homo sapiens

<400> 457

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gagacatgtc cctatgacat agcagtgggtg agcctggagg aggacctgga tgatgtcccc 180
atccctgtgc ccgctgagca cttccatgaa ggcgaggctg tgagtgtggt gggctttggc 240
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gacaataata cggggggccac ctacccccac ctgaacttca gcattcccat cacggtgctc 480
cagccggccc tgcagcagta cagccagacc caagacctag gtggcctccg tgagctggac 540
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cggagcaagc tctgaggctg tgttaccacc tttggaaaga agagtacct tttctgctg 660
taggaagtga tgttgagggt acggtggcct caggattcag ggcccagccc ctgcaggggc 720
ccaggtgcc tctcatctcc acccactgac tgcagactgg gctttgggct ctggggcaaa 780
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cactccaact gcacagaagt tctgggcctg acaggtagat tccagctgga aggcaggccc 960
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tcttcatatg ccaacagggg cgctcttgac actgtgcctt cattttccag cccacagcct 1260
gggtctcagg gatcttgagg ggtagaacat gtctggttgg ggcttgggaa taaacatgat 1320
ctattgaaaa accwcwrtat ttatatttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380
aaaaaaaaa aaaaaaaaaa 1399

<210> 458

<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<400> 458

cacgagcggg cacgagattt aatgtttcca aggttagacg ttcacttttt gagacgnttg 60
agtagctttt cacttaattg actagcatgt atgggtttct ttaccaggt ccacaattca 120
ctacacaggt ccagaaaaaa agctgatctc tgaaaagcac taggagaagg cagctagaga 180
gggagaattc taattaggcc ggggtcctct gtggcttgaa tgactgaata agtttttata 240
gtcttcaatt cagtgacttc cagattcttc ccaaagaaat ttctagrgat caagagtagg 300

```
ctcttttcgga agtacttgcc cgtattacac ttttaatttta caaaccaaac aacagcaatt 360
caaccaatca aacaacaaaa acaatccaaa gaaagagact tggacatagg catcaaggaa 420
tcattttcact ttataattta atagaacact ggtgtatcat tcattaattc tgaaagtga 480
aactaaatgt aaaataattt tgtaagggtt gtgaattggt gcctaggtat tctggtgatg 540
tttacttttag tgattttatc attaatgaaa gcaatgtggt tttttagaaa acatattatt 600
agggttcata acgttgacat tctgttggtg caatcataat ctctgtttt gttttagtcc 660
tagctctaca gttgaatgaa tccaagctca cctccaggcc ttttgctat 709
```

<210> 459

<211> 1283

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<400> 459

```
agcagtctgc cgtggccatg tacatgctct ataagaagca gaagcagcag aacgtggccc 60
actgcatgct ggtaagcaac cgcgtntctc tgggtggggga gcacgctggc catgctgcag 120
cgccttcaag gagcagcagt tcgtnatcgc cgggggtctg gtggaggaca gcaacaacca 180
ccacctcatg ctggaggcca gcragtgggc caccatcgag gggctgggtg agctcctgca 240
gcccttcaag caggtggccg agatgctgtc ggctccagg taccaccca tcagcatggt 300
gaagccgctg ctgcacatgc tccraaacac cacgctcaac atcaaggaga ccgactccaa 360
ggagctcagc atggccaagg aggtcatcgc caaggagctt tccaagacct accaggagac 420
gcccagatc gacatgtttc tcaacgtggc caccttctg gacccccgct acaagaggct 480
gcccttctc tccgccttcg agcggcagca ggtggagaat cgcgtggtg aagaggccaa 540
gggctgctgg acaagggtcaa agacggcggc taccggccgg ctgaggacaa gatcttccc 600
gtgcccagag agcctcccgt caagaagtc atgcggacat ccacgccgc gcccgccagc 660
gtcatcaaca acatgctggc cgagatcttc tgccagacag gcggcgtgga ggaccaggaa 720
gagtggcatg cccaggtggt ggaggagctg agcaacttca agtcccagaa ggtgcttggc 780
ctcaacgaag acccctcaa gtggtggtc gaccgcctg ccctcttccc cctgctgccc 840
aaggtgctgc agaagtactg gtgctgacg gccaccgct cggccctgag cgtctcttcg 900
gatccgccgc caacgtggtc agcgccaaga ggaaccggct ggctcccgc cacgtggaac 960
gagcaggtgt ttctgtatga raacgcccg agtggggcag aggcggaacc cgaggaccag 1020
gacgargggg artggggcct ggaccaggag caggtgttct ccttggggga tggcgctcasg 1080
gcggtttctt tggcattagg gacagcagct tcctgtagcg aggaagcgtg ttgtcttaca 1140
agtcatcccc gcagcagccc attggatgct ttgctgtaaa tacttaccgc gtcagcttgg 1200
ttttgaacct cagagaccat ccactgtctt tgacacctag aaggtggaaa aaggaaagag 1260
attcgagaag tgagagaggg tcg 1283
```

<210> 460

<211> 435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 460

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tcgacccacg cgtccgcaag tacaaaaacc ttaagtttca tttgtagggc cacagatcat 60
agaatttcaa atgacatatt acatagtttg taaatgtata tatttggttg actgaaactt 120
aatcataatt tagttcttaa aactatgtgg cttgaagtgg caagtagcaa gtactgattt 180
taccagattc aagttgattt ttaaaagtaa ccattggaga aatcggtata catttgtttg 240
caggattttt acctcctata actccaccag aaaagttttt tctttcccag ctgatgctgg 300
cacccccacg ggaactcttc aaaaagacgc ctcgccagat tgcactgatg gacgttgga 360
acatgggcca gtctgtggam attagtgggc tcagttagcc ttggccggtg aggrggaayc 420
agtgtttggg nattc 435
```

<210> 461

<211> 654

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (138)

<223> n equals a,t,g, or c

<400> 461

```
gcgwccgagc cttyggagct cccagcgtcc cctcggggttc aatcctccag gacctgtgtc 60
tgatgcctgc atgtgggtac ctgggctcca tcaggttcta gatcggcctc cgccctccac 120
tttcagggct ccaggccnag cttctcatgt ctgtggggag ggtctccaga gccttggtct 180
gtggctgagc tgtggaactt gaaggcctct ctgcatcttg tcaactcgtg cccctgcacc 240
ttgggtcatg acctgcttta tgtggcaacc ctgtgacagc tgctaagtcc tagaaaacac 300
gtaacaggac gtgaggtgcc ctctgcgccg tgtgggcgcg tgcggggaga cccgggcccc 360
aggacgtgag gtgccctctg cgccgtgcgg gcgcgtgcgg ggagaccgg gccacatgcg 420
agcggggccc cgagacattc tgcactcggg aattgcgggg attatcaaatt cccgcttcag 480
tggaagacgt gagcgaaacc caaggtgagt ggccgcagcc ttctgtcacg tgctctccc 540
catgtcctaa gtragggtct aggtgagct gccgttgccg agagccttgt gtctgtctcg 600
ggtgtctgca ctgtgagtgg ctccgtgctr gcgtccgcac cagccgcttg gggc 654
```

<210> 462

<211> 2245

<212> DNA

<213> Homo sapiens

<400> 462

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aattacccgg tcgacccacg cgtccattgt cccaatgtgc ccggctcagc ctgaggaagc 60
agtcgtctct ccaggagcca ggtcccgatg tggaggccta gcgccgagga acagtgtgtg 120
gcacccgcct ggccccccag acccaccctg ccaacatcaa gttgttcctt ctgctccgga 180
gacccctggg gtgcggccct ggccccctcc acccctgctg ggccagagcg ggtgggcagt 240
gtcaaggccc gctgtctccc aggtgcttgc tgggactcgg ggccggtgca cctggetgtc 300
acctgggtgt gctgtgtgta ggggtccttg cgtggccccc atccttcccc caatgcagaa 360
```

```
ctccatgggc agggagctgg ggggacatct cacctcccc atggcacaga gccctccaca 420
ccccggacc agggcatccg ggccctagaa attccacagc tcccgtcctg gccaccctgg 480
aagctcatca ggccaagacc cggacagagc ttcagaggag tgttgagtga cacctgagga 540
tgcggtgca cacactcagc caagggccga gtctcacctg cggtggggtt tcggctctgc 600
ctgggggctc catcccttcc agccactcgt ggccttgagg atttctggtt gtccccagct 660
gggactgttc acagttgtca cctgcagacc tgccctctccc tggcctgagg ttcaaaggcc 720
tcatcggtg gtcagtacag tggggtcacc tgttgtttct atacaacagc agggaagggg 780
ccatggagct tttccctgct gggtgctcct gctttggccc agcccacctt tcctggtgct 840
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tccccacct gcccttctg ggtgacacag ccggtaaacg gaatcacgta tggttctttc 2040
tgtgggtctg tggcacagca ggaagagccc sgtgccgcca gcacctgtg gaagaccaca 2100
catgggtggt cccacagcat gggaccaggg tggcctgagg gatgcccagt tgtaacaatg 2160
ctgctgtcac tgtctcatta aatatacatc ctttaaaaaa aaaaaaaaaa aaaaaaaaaa 2220
aaaaaaaaaa aaaaaaaaaa aaaaaa 2245
```

<210> 463

<211> 1280

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1016)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1254)

<223> n equals a,t,g, or c

<400> 463

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caggaaaatg ctgtccagtg ggggtgtgtac atcaactgtt cagcttcctg ggaaagtagt 180
tgtggtcaca ggagctaata caggatcggg gaaggagaca gccaaagagc tggctcagag 240
aggagctcga gtatatattag cttgccggga tgtggaaaag ggggaattgg tggccaaaga 300
gatccagacc acgacaggga accagcaggt gttggtgcgg aaactggacc tgtctgatac 360
taagtctatt cgagctttkg ctaagggtt cttagctgag gaaaagcacc tccacgtttg 420
atcaacaatg caggagtgat gatgtgtccg tactcgaaga cagcagatgg ctttgagatg 480
cacataggag tcaaccactt gggtcacttc ctctaacc atctgctgct agagaaacta 540
aaggaatcag ccccatcaag gatagtaaat gtgtcttccc tcgcacatca cctgggaagg 600
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gttacgacgt attctgtaca ccctggcaca gtccaatctg aactggttcg gcactcatct 780
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aagggtttca aaacctttag cacaagaga gcaaaacctt ccagcctggc caacatnggt 1140
gaaacccac ctctactaaa aattgtgtat atctttgtgt gtcttctgt ttatgtgttg 1200
ccaagggagt attttcacia agttcaaaac agccacagta antcagagat ggangcaaac 1260
cagtgccatc cagtctttac                                     1280
```

<210> 464

<211> 2431

<212> DNA

<213> Homo sapiens

<400> 464

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gttgtgtga ggcgagggg gtcgccattt tggatggtga accctgaagt cgggtgtctgc 60
tgcgttcacg gcaggattcg gttaggagga acagcacagc atgctgggct ctggatttaa 120
agctgagcgc ttaagagtga atttgagatt agtcataaat cgccttaaac tattggagaa 180
aaagaaaacg gaactggccc agaaagcaag gaaggagatt gctgactatc tggctgctgg 240
gaaagatgaa cgagctcgga tccgtgtgga gcacattatc cgggaagact acctcgtgga 300
ggccatggag atcctggagc tgtactgtga cctgctgctg gctcggtttg gccttatcca 360
gtctatgaag gaactagatt ctggctctggc tgaatctgtg tctacattga tctgggctgc 420
tcctcgactc cagtcagaag tggctgagtt gaaaatagtt gctgatcagc tctgtgccaa 480
gtatagcaag gaatatggca agctatgtag gaccaaccag attggaactg tgaatgacag 540
gctaattcac aagctgagtg tggaaagccc acccaaatc ctggtggaga gatacctgat 600
tgaaattgca aagaattaca acgtacccta tgaacctgac tctgtggtca tggcagaagc 660
tcctcctggg gtagagacag atcttattga tgttggattc acagatgatg tgaagaaagg 720
aggccctgga agaggaggga gtggtggctt cacagcacca gttggtggac ctgatggaac 780
ggtgccagat gcccatgccc atgcctatgc catctgcaaa tacgcctttc tcatatccac 840
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tgccaaaggg accatcagat ttcaatggac tgccaatggg gacttatcag gcctttccca 900
atattcatcc acctcagata ccagcaactc ccccatcgta tgaatctgta gatgacatta 960
atgctgataa gaatatctct tctgcacaga ttgttggtcc tggacccaag ccagaagcct 1020
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catctgtgcc agacacacta ccaactgcat ctgctggtgc cagcacctca gcatctgaag 1140
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atggaacctt taaaactaat ctcagaaaaa ttttggtgc ccattgcagct gtagttgttc 2160
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ctgtgtagta tacctgtaca tacttgtttc aggcagcctt tctttaatgt tttcagttgg 2340
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2431

<210> 465

<211> 589

<212> DNA

<213> Homo sapiens

<400> 465

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tctactgttg aatgtgctct taaacatgtc tcagattggg tggatgaaac aaataaaggc 120
acaaaaacag aggggtgagac agaagtgaag aaagatgagg ccggagaaaa ctattccaag 180
gatcaagggt gtcggacatt gtgtggtgta atgaggattg gcctggttgc aaaaggcttg 240
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accctgttaa atacagtcaa agataatctt cctattcrga ttcagaaact cacagaagag 360
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cccacgctaa ctttgaagggt gatacttacc tcaccttaa ttagggacga attggagaag 480
aaggatggag aaaatgtttc gatgaaagat cctccggact tattggayag gcagaaatgc 540
ctgaacgcct tggcgtctct tcgacatgcc aaatggtttc aggcaaggg 589

<210> 466

<211> 1107

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (1099)
<223> n equals a,t,g, or c

<400> 466

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gcccaccacg gcctctctcg gcgaggaaac tctggcctcc gcttcctcct cctccgactc 60
ggacaccggc ggagcctccc cgcccccgcg gaagaaaccc cgccagcaac aatagcaaca 120
gcctgaatgt caataacggg gttcccggcg gggcgggcgc cgcctcctca gccaccgtcg 180
cagctgcctc cgccaccacc gccgcctcct ctcccttggc caccaccagaa ctgggcagca 240
gcctcaagaa gaagaagcgg ctctcccagt cagatgagga tgtcattagg ctaataggac 300
agcacttgaa tggcttaggg ctcaaccaga ctgttgatct cctcatgcaa gagtcaggat 360
gtcgtttaga acatccttct gctaccaaact tccgaaatca tgtcatggaa ggagactggg 420
ataaggcaga aaatgacctg aatgaactaa agccttttagt gcattctcct catgctattg 480
tggtaaaggc cgcacttgaa atctctcaaa cgttgttggg aataattgtg aggatgaagt 540
ttttgctgct gcagcagaag tacctagaat acctggagga tggcaaggtc ctggaggcac 600
ttcaagttct acgctgtgaa ttgacgccgc tgaaatacaa tacagagcgc attcatgttc 660
ttagtgggta tctgatgtgt agccatgcag aagacctacg tgcaaaagca gaatgggaag 720
gcaaagggac agcttcccga tctaaactat tggataaact tcagacctat ttaccacat 780
cagtgatgct tccccacggc cgtttacaga ctctcctgcg gcaggcgggtg gaactacaaa 840
gggatcggtg cctatatcac aataccaaac ttgataataa tctagattct gtgtctctgc 900
ttatagacca tgtttgtagt aagaggcagt tcccatgktt atacgcagca gatacttacg 960
gaagcattgt tatgaatttt ggttcctgtt aattcctcct aatgaatggc acttaaaactt 1020
agcaaccagg atcccaaaag atacaaccag ttatttcata ttggcaattt ttgaatcccc 1080
ggaatacaca ccctgcttna aacttgc 1107
```

<210> 467
<211> 2197
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature
<222> (846)
<223> n equals a,t,g, or c

<400> 467

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ccgccaatga aacgcctccc gctcctagtg gttttttcca ctttggtgaa ttgttcctat 120
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gaaggaagtt attattgtat gtgtgtacct ggcttcagat ccagcagtaa ccaagacagg 360
tttatcacta atgatggrac cgtctgtata gaaaatgtgr atgcaaactg ccatttagat 420
aatgtctgta tagctgcaaa tattaataaa actttaacaa aaatcagatc cataaaagaa 480
cctgtggctt tgctacaaga agtctataga aattctgtga cagatcttcc accaacagat 540
ataattacat atatagaaat attagctgaa tcatcttcat tactaggtta caagaacaac 600
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agaacacatc ttacaaaact catgcacact gttgaacaag ctactttaag gatatcccag 780
agcttccaaa agaccacaga gtttgataca aattcaacgg atatagctct caaagtttyc 840
tttttngatt catataacat gaaacatatt catcctcata tgaatatgga tggagactac 900
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<210> 468

<211> 3611

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3581)

<223> n equals a,t,g, or c

<400> 468

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<211> 520

<212> DNA

<213> Homo sapiens

<400> 469

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cttgatgagg tgaggttgag atatggttgt agtaggatgt gactttcatg ctttcagcaa 180
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agaagatacc tcagaaaggt cggaagaaaa aaggtcagt aactgctggg acttaggtga 360
tcaggtgcaa ggtggggagt acaaattgag tctctttgga ttgcccattc tgggtctcac 420
caagccctgt agtatctctt ccatactggg caataatctc cttaggtggg cttttatatt 480
ttgctttcct garctggaaa tcagcatcwt tyacaaattg 520
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<210> 470

<211> 879

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<400> 470

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gaaaaccgg cgccgtcatc gagagctttg tgaatcacgc cccgggggtc ttctcaggga 180
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tcaaagttcg tgggtgggctt aggatctctc ggatcggcca aacttcggcc ctcgcaaccg 780
cagccccagg gcggcgccgg aattcgcaga accccggaaa agaaagttga ccagcccttg 840
caaggagagc gggcaattcc cgcagtcaag acaggttgc 879
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<210> 471

<211> 2557

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (461)

<223> n equals a,t,g, or c

<400> 471

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<210> 472
<211> 467
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (455)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (466)
<223> n equals a,t,g, or c

<400> 472
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<210> 473
<211> 1840
<212> DNA
<213> Homo sapiens

<400> 473
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<210> 474

<211> 1258

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<400> 474

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gcagctaaaa acawraaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1258

<210> 475

<211> 4231

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4136)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4167)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4184)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4223)

<223> n equals a,t,g, or c

<400> 475

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<212> DNA
<213> Homo sapiens

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<222> (689)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (691)
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (1127)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1143)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1289)

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<220>

<221> misc feature

<222> (1319)

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<220>

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<210> 478

<211> 1237

<212> DNA

<213> Homo sapiens

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<222> (1232)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1236)

<223> n equals a,t,g, or c

<400> 478

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<210> 479

<211> 1098

<212> DNA

<213> Homo sapiens

<400> 479

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<210> 480

<211> 684

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 480

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<210> 481

<211> 2995

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1760)

<223> n equals a,t,g, or c

<400> 481

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<210> 482
<211> 1248
<212> DNA
<213> Homo sapiens

<400> 482

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cattctttca tcttgacacac tggagagag tggagggggc tttgaatcct ttgcattgta 660
cgtgggaagg cacttttcgg atgatccctt atcccttgga aaaggggcac ctattttatc 720
cttaccacat ctgtacagaa acagcagacc gagagctgct tccatctttc catgaagtct 780
cagtttacc aaagaaggag cttcccttct ttattctctt tactgctgga ttatgttccct 840
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gcatgacttt gaaaaagggg agccattccg agattttaaa atgttcatgg actattccat 1140
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```

<210> 483
<211> 1862
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature

<222> (124)

<223> n equals a,t,g, or c

<400> 483

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gcagcgaccg ctttggtcgg ctgtgtagac tggtgggtag gctgcgtgct agcttcggcg 60
cggatccctg ggcgtccgta cgtcggagtc cttcgtcctc cagggtcctt gttctttgcg 120
ccancgggaa ccactatctc tgcactcctg gggttttgtt acatggctgc tttcctcaaa 180
atgagtgtta gtgtcaattt cttcagacct ttcaccaggt ttttggtgcc atttaccctt 240
cataggaaga gaaataactt aacaattttg cagagataca tgtcttccaa aataccagct 300
gttacttatc ctaaaaatga gagtacacc cttctgaag agctagagtt ggataagtgg 360
aaaactacca tgaaatctag tgtgcaagaa gaatgtgttt caacaatctc aagcagtaag 420
gatgaagatc ctctagctgc caccagagag ttcatgaga tgtggagatt gcttggcaga 480
gaagtaccag aacacatcac tgaagaagag ctcaaaaccc ttatggaatg tgtttctaac 540
acagcaaaaa aaaaatattt aaaatattta tatacgaagg aaaaagtga aaaagctagg 600
caataaaaaa aggaaatgaa agcagcagca agggaagaag caaaaaatat caagctgcta 660
gaaaccactg aggaagataa acagaaaaac tttctatctt tacgactttg ggataggaat 720
```

atggacatag caatgggctg gaaggggtgcc caggccatgc agtttggaca acctttgggtt 780
tttgacatgg cttacgaaaa ttatatgaaa cgaaaagaat tgcagaatac tgtttcccag 840
cttttagaaa gtgaaggatg gaacagaaga aatgttgatc ctttccatat ttatttctgc 900
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atgtaattgg gtcttttgggt gataagagta tgcagccagg cacatcccta gccaaaggcaa 1140
aacggctgaa cctggcaact gaatgccttc cattagataa atatttaciaa tgggaaaattg 1200
gtaacaaaaa tctcacctta gatcaaatga tacgtattttt gttatgtctg aaaaaacaatg 1260
gtaattggca agaggctctg caattcgttc ccaagagaaa acatactgggt tttctggaga 1320
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ttttttatgg aggttcctag aggggtggtgc cctgggggtg gcttggaagc tctgcacccc 1740
ttcccccata gctttccccg tgcattctct tgtctgtatg ttttgaata tcttttacag 1800
taaactggta aatgtgtttc cttcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1860
aa 1862

<210> 484

<211> 1664

<212> DNA

<213> Homo sapiens

<400> 484

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tttctaattc cctaaaattg tgtgggtgga gtggagccct gcagttgggg ggtaacatgg 180
accactgatt ttgccctttg accctgcaca atgacctttg catcagccaa actcattgcc 240
atgacaactc tttgtactgt gtccgtgcc aagatctgtt ggacacattg ttaatagtaa 300
aggggacaag ttggagacgg tcaattttta cattttttgt tgcaattttt tcttcaatgg 360
ttgtaagtag tttttttttt ttttaataat aaaagggttc actagttaat actctagaaa 420
tatctgtgtg ttgcaattca aatgtatgtt gagattgtga aaagcgcttc agtgccacta 480
gcttaccggg aactagact aagccctga tgacttattg catgatacag taccaggaac 540
aacagggtgg ctaaatatcat gaaaagcagt gtaagctagt gacactaaag ccagtcttgt 600
attactgtat ttttgacaga atggttttga aaactgtgct acagggactg atgtggcaaa 660
tatattctct tatgcagaag gaagtctttt tttttctttt tttttttttt aagaagtatg 720
gctttttatg catccttcat cgagggcatt gaagtgtcat ggactgataa aagttgatgc 780
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acaaatgagc agtgcctgtt caatttcaca gtctctgttg agttcagttg taaatatgtt 900
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tattatacga cagttactta atttctagag ttcaggcctc tgggatcaac cccagactgg 1380
gccagaatgt tagtgaagggt tttattgtgc ccggttggag gataacgttc tttgggtact 1440

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ttttgtgggt tgcaaatgaa ctcaattgcc acaagtttta aactgggtgta aatcaagctt 1500
gacttaaatgt gattgttact gttatatcca gcctatactg ctagcagctg ctcatactgc 1560
agtcaattac tggaagcgga tatatttcct atgcaaaaaac tgtttaaaca ataaaatgag 1620
ctatgctaca gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1664
```

<210> 485

<211> 969

<212> DNA

<213> Homo sapiens

<400> 485

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cagagacggc tgtccgcccg ctgggcgccg ctgcggattt ggtaaatggg aggtgacgct 120
ggtgaccgag agccggggcc cgctgccagg agcctgggcg agggccaggc tggctttgct 180
acagctgacc actccgggtca ggagagagag actgagaagg ctatggatcg actagcccg 240
ggaacacaga gcattcctaa tgacagtcct gcccggggtg agggcaccca ttctgaagag 300
gaaggctttg ccatggatga ggaggactct gatggagaac tgaatacctg ggagctgtca 360
gaagggacaa actgtccacc caaggaaacag cctggcgatc tttttaatga ggactgggac 420
tcggagttga aagcagatca agggaatcca tatgatgctg acgacatcca ggagagcatt 480
tctcaagagc ttaaaccettg ggtgtgctgt gcccacaaag gagacatgat ctatgacccc 540
agctggcacc atccgcctcc actgataccc tattattcca agatggctct tgaacaggga 600
cagtttgacg atgctgaaga ttgagtgtgg agctttctgc cttgtagggtg ggcgggcctc 660
cacgtcaaga tctcttttcc tgtcttgagg gtgaaaagtc atatctgaga aaatgtttgc 720
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cccgctcattc tcgccagtct gttgttgttc ttaatgggct cctccttgaa atgtgtgtgt 840
gtttgtgtca agaggagttg tgttctttgt aaataaagggt taaaaagaga aaaaaaaaaa 900
aaaaaaaaat ttttgcccca aagggggggcg gttaaaagat aacggcgggcg gggatttgtg 960
agaatatgc 969
```

<210> 486

<211> 2572

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (823)

<223> n equals a,t,g, or c

<400> 486

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cggcggcagc agcagcagca gcggaggcac cgggtggcagc agcagcatca ccagcaacaa 120
caacaamaaa aaatcctcat caaatcctca cctaagcttt cagtgtatcc agatccacat 180
cttcactcaa gccaggagag ggaaagagga aaggggggca ggaaaaaaaa aaaacccaac 240
aacttagcgg aaacttctca gagaatgctc caaaactcag cagtgttctt ggtgctgggtg 300
atcagtgtct ctgcaaccca tgaggcggag cagaatgact ctgtgagccc caggaaatcc 360
cgagtggcgg ctcaaaactc agctgaagtg gttcgttgcc tcaacagtgc tctacaggtc 420
ggctgcgggg cttttgcatg cctggaaaac tccacctgtg acacagatgg gatgtatgac 480
atctgtaaat ccttcttgta cagcgctgct aaatttgaca ctcaaggaaa agcattcgtc 540
aaagagagct taaaatgcat cgccaacggg gtcacctcca aggtcttcct cgccattcgg 600
aggtgtcca ctttccaaaag gatgattgct gaggtgcagg aagagtgtca cagcaagctg 660
```

```
aatgtgtgca gcatcgccaa gcggaaccct gaagccatca ctgaggctgt ccagctgccc 720
aatcacttct ccaacagata ctataacaga cttgtccgaa gcctgctgga atgtgatgaa 780
gacacagtca gcacaatcag agacagcctg atggagraaa ttngggccta acatggccag 840
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gtactgtgcc tggtttgatt tttttaaggt agttcctatt ttctatcccc cttaaagaaa 1140
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accaacaaaa tccatgtgac cattctgcct ctcctcagga gaaagtaccc tcttttacca 1260
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atgtaactct ccagccattg taatttgaag atgtggatcc ctttagaacg gttgccccag 1380
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aattcttgat ctctaattgag ctagtgtctt atggcttga tcctccaatg tctaattttc 1560
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aagcagtata taataacttt attgcatata gatttagttt tgtaacttag ctttattttt 1860
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caggaatgag tcaatcagcc tttaggtctt tagtccgggg gacttggggc tgagagagta 2340
taaataaacc tggctgtcca gccttaatat acttctctta cattttcgtc ctgtagcacg 2400
ctgcctgcc aagtagtcct ggcagctgga ccactctctg aggaagtcta ttaaggctgg 2460
acagcccagg gttattttata ctctcccagc ccactcaac ccagaggcta ctcttgactt 2520
agacctatac tgaaagatct ctgtcacatc caactgaaa ttccaggaa ca 2572
```

<210> 487

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1256)

<223> n equals a,t,g, or c

<400> 487

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atgcagacac cccagctttt gaggggtgctg ggggtaggac tgaggcagcc ccactgggaa 120
ccagactgca gcctggccca tggctgtttt cccaaggatc agttcctgga ggggaagggt 180
ctggccctga ctccgctgtg tcccgagcac acgtgctgac cgcagcccgc cgccctgtag 240
ttcttggtctg ggtctggagg tgtctgtgga gcaccctgcc ctcaccacag gagcgtgagc 300
cacttctgca gtccacgctg aacatgggaa acaacctgaa aagcaggcag gcctcccgtg 360
caggagacct ctgctgtgct ggcttcccat gaccacctcc tcctgctgaa atattactgc 420
```

```

ttgaatctgg agcagattgc gggtttataa aactgctttt tatctgagaa caaacggggt 480
tggaatttag tegtcttttt tccccactcc cagagctgct caartcattc caccggcccc 540
ctcggcttgg gacagggttag tgtaactccc gatcccaggg cctagccctg acacagggtgg 600
cttcccgtat cccgggtggg aaacgccctg ccaccagcgg gcttgagctg gcctgtgtcc 660
ctccacygcc tgcaccaccc acctccagag tgcagtgctg ggcaagggca gctcaagagr 720
acaggaccag gcgcttgga agacatcaga cacacccaac ccaaaggcgt ggacccccagg 780
ccgggcccgt ggtaccagc aggtggcact gcagctcccc gtcctgcag gtccagcgtc 840
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cccaagctgc gccggcctcc agcccacca cagctgttgc tgaagtcagg cctccctccc 1140
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gggttggtcca attctgtaac attcatctcc attttttaaa aaggtttctc tgacgncccc 1260
acggcccagag ccgcggtgag cgtcgtgttg catgagcctg ggccccgggc ttcccggtgcg 1320
cctctgccgc aggtgcttct gggcacccat cctctgcgtt tcatttgcag tcgactgtac 1380
agaaggcact caccacaata aacctttcct gaaagcagaa aaaaaaaaaa aaaaaaaaaa 1440
aaaaaaaaa a 1451

```

<210> 488

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<400> 488

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gaccggccca cgcttcccgc cagtccccta accctgaggc tgccgcgcgg cggtcactgc 60
gccggggtag tgggccccag tggtgcgctc tctggcgtt ccttacactt tgcttcaggc 120
tccagtgcag gggcgtagtg ggatatggcc aactcgggct gcaaggacgt cacgggtcca 180
gatgaggaga gttttctgta ctttgccctac ggcagcaacc tgctgacaga gaggatccac 240
ctccgaaacc cctcggcggc gttcttctgt gtggcccgc tgcangcaag aaggggttaa 300
aagtggaatg tatgttgtaa tagaagttaa agttgcaact caagaaggaa aagaaataac 360
ctgtcgaagt tatctgatga caaattacga aagtsctccc ccattccccc agtataaaaa 420
gattatttgc atgggtgcaa aagaaaatgg tttgccgctg gagtatcaag agaagttaaa 480
agcaatagaa ccaaatgact atacaggaaa ggtctcagaa gaaattgaag acatcatcaa 540
aaagggggaa acacaaactc tttagaacat aacagaatat atctaagggt attctatgtg 600
ctaataataa atatttttaa cacttgagaa cagggatctg ggggatctcc acgtttgatc 660
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aaaaagaaac tgggatagga gttagacaat taaaaggggg tgtatgaggg cctgaaatat 780
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acaattgata ataacatttt gaaaattgga aagatggtat actgttttta gaggaataaa 1020
cgtatttgtg gtttaaaaaa aagagcaact tcctttgcac tgtataccct tttgtattat 1080
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ttgaatatct ttccataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200

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<210> 489
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c

<400> 489
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ctaacaggat gtctagtgtt cagtgggtgt cacaagattc agtctgcaga gccgacttcc 120
tcagcctcct gaagacactg aacaccgcag tggtttccag tcagcaacgc aacaaaatca 180
gtttaagtga taatgacaat aacaaacaat ccatagcatt cacagcattc actgcttact 240
gnaaaactta ctatgtccca ggcacaagca ctgactttaa tcttg 285

<210> 490
<211> 682
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c

<400> 490
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gnggactcca aagggacggn ccgcggtgtg cagcgagctg cgctcagggg accttgccgc 120
cggcccttct gctgcacaca gccacccag gacctccgc agcgctgaca ggcggggcgg 180
gtgcaaagac ggggagggggt ctctgcgccc ggccccctcc cctgactatc aaagcagcgg 240
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gaaagtccag tctctcctcg gcttgcaatg gaccccaact gctcctgcgc cgctgggtgc 360
tcctgcacct gcgctggttc ctgcaagtgc aaagagtgc aatgcacctc ctgcaagaag 420
agctgctgct cctgctgccc cgtgggctgt agcaagtgtg cccaggggctg tgtttgcaaa 480

ggggcgctcag agaagtgcag ctgctgcgac tgatgccagg acaacctttc tcccagatgt 540
aaacagagag acatgtacaa acctggattt tttttttata ccaccttgac ccatttgcta 600
cattcctttt cctgtgaaat atgtgagtga taattaaaca ctttagacct gaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aa 682

<210> 491

<211> 1859

<212> DNA

<213> Homo sapiens

<400> 491

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agcaggaagc tccctttctc acccttttgt tcccttgccg atagaatcag tcactattag 120
aaaaaatgaa agacgctctg tttaaaacaa tgatgacagc agtacttaat atgtatttcg 180
aggtgaactt atatagattg agagaggctg catttggcag actgatgtat aggaagacct 240
atgtgtttct agcttctccc tgcagggaaa atgctttcgt cattatagcc tctttacaca 300
gactggccat tctagtgaac aggtggtaaa cctttgggct gccagaaac attttatctg 360
ktttcactta cctaggaagg ggaaagatta gcgggtcatc caaaatctgt atgtaagcta 420
tcttcatttt cttccccaac cttctcctcc tgggaaacac aaatgctatc tcacttgaca 480
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tggggtgcct ggcattctca gcatttctca ggggcctccc acctctgaca actgcagtgt 660
tagctaatac ataccttgag catagaactg aatgctgtaa ttcagagcca tttttttttt 720
caacttgaac attgtacaat tttactgcaa tttcctttga actttcttgc cactgttttg 780
aatcttaaaa attcattagc cttctccttt ctgacataaa gctactcttc atcagagatg 840
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gtggaaaaaa aggttttaaat atgcaaatta ctaataaatg tgtaacctta tgtaacttgt 960
gttacatcaa gtaacaagct aatctagttt gtttcaactg actaggcttg tgctccctac 1020
ttcagtattt tgatgctttc cttgatcttt gtttcacaaa atgttggtgaa ttttggtatc 1080
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<210> 492

<211> 2709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2160)

<223> n equals a,t,g, or c

<400> 492

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gatgagttca ttgagagtat ttcccttctg ccggaacctg agaagaccct gcacactgaa 180
gatacagatc accagcacac tgcaagccat ggggaggaag aagccctaaa agaagatccc 240
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```

2709

<210> 493

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1307)

<223> n equals a,t,g, or c

<400> 493

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atgacaaaagg tagaaaaaag cacaaatgaa gcaatggagt ggatgaataa caagctaaat 180
ctgcagaaca agcagagttt gaccatggat ccagttgtca agtcaaaaga gattgaagct 240
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gaacctccaa aagaggaaca aaaaaatgca gagcagaatg gaccagtggg tggacaaggga 360
gacaacccag gccccaggc tgctgagcag ggtacagaca cagctgtgct tcggattcag 420
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tcaattcgca c                                     1451
```

<210> 494

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 494

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gtgaagtcca aggacgtgg tcttctttct ccctttgtag agtgaggatg aagctctgca 180
gcgggccctg gaaatgtccc tggcagaaac caaacccag gttccaaggt acctaccct 240
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tactaatacc caccttgtag tgttgctatg aagattgaga taatcctcag cagtgtcag 480
caccatgagg cccaacacac acagatcaga tgttcaaatt tcagatctta ccatcatcca 540
```

```

acttaaactg tttctccctc ccagttgtca ggaggaagaa gacctagctt tagcacaagc 600
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gaaaaataaa aggatcttgg cagttgataa aacgtaaaaa aaaaaaaaaa aaaaaaaaaa 1260
ggggggggg                                     1268

```

<210> 495

<211> 384

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<400> 495

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ccctagggtg tgaggaattc ccagttcaca atctcctgag cagtgcgtgg catctacaga 180
gaggcccgtg ttttcctttt cattaagaca gggctctctg tgccctaggct ggagctcagt 240
ggcacaatca tagctcgctg cagccttgga actcccaggc tcagggtgatc ctgccttcag 300
ccccggcccc agtagctggg accccaggca tgcaccatta caaccaacta attttttttn 360
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```

<210> 496

<211> 975

<212> DNA

<213> Homo sapiens

<400> 496

```

aattcggcas agcgggaagt tgctctcaga ggcagcgtgc ggggtgtgtc tttgtgaaat 60
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aacctcatct tcagatactt acaaaaataga tcgcggattc aggtgtgggt ctatgagcaa 180
gtgaatatgc ggatagaagg ctgtatcatt ggttttgatg agtatatgaa ccttgattta 240
gatgatgcag aagagattca ttctaaaaca aagtcaagaa aacaactggg tcggatcatg 300
ctaaaaggag ataattattac tctgctacaa agtgtctcca actagaaatg atcaatgaag 360
tgagaaattg ttgagaagga tacagtttgt ttttagatgt cttttgtcca atgtgaacat 420

```

```

ttattcatat tgttttgatt accctcgtgt tactacaaga tggcaataaa tactatggga 480
ttgtttgtat taaaaaattt acattgcttc ttactattca gcagtagaaa ctttttacac 540
agtaacacca ttcgttgytg gtatttagtt ttctgaaggg tcgcagttgc cttgagcact 600
tggtattcgc agagcttgga cctgtagatt ttgaggcaga ttaggaattc tgctgatgg 660
gtaagcttcc agtattggga ggtggagaag gggagggttc agaaaaataa ataagagtta 720
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tcmctgtgag gtcttkgtga attttatcgc taagatcaga atgtgagaag tatttgata 900
tagggaaaga atgaagtgcc tttcaagtac attaaaaatc aagttaagag tttacaggaa 960
agagactgag attgg                                     975

```

<210> 497

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 497

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caccggcgtg tgttaccctt cccgggtggc tcacacactc tcattcacac acacaaatct 180
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cagcaggact ccgccagtct gatgccagga ctgaataaag tgtatttgcc ccgaccttgc 540
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```

tctgttttcta gagaaaccca gtctacaaca gaggg

2075

<210> 498

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 498

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atthgttttt ttttctcaca acatctggcc tatattgtct gtcaggargc catgggtcca 180
atgtaaagta catagtthctt acatacttht aactgcagct ggtccctgac ctcaccaggt 240
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tgttgaaatt taattgctaa atagtggthg gtgattctth acagtaggaa thgtaataat 1740
ththctgcaa atagthtatt tactgctatt gatattgaa aattthgtct thattcagat 1800
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```

<210> 499

<211> 2871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (267)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 499

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tattgagctt aaggaagata aatttcccaa atatgatatt tggatatatt gtgtgtctgt 420
aatttttttt ttaatttaat gctgtattta atttgtaagt cctgccattg actctaccag 480
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<210> 500

<211> 1624

<212> DNA

<213> Homo sapiens

<400> 500

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aaaa 1624

<210> 501

<211> 848

<212> DNA

<213> Homo sapiens

<400> 501

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<210> 502

<211> 3192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<400> 502

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3192

<210> 503

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (622)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (626)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<400> 503

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ggggcgagsg gcaagatggc agaagtagag cagaagaaga agcggacctt ccgcaagtgc 180
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<210> 504

<211> 2196

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2104)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2196)

<223> n equals a,t,g, or c

<400> 504

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<210> 505

<211> 949

<212> DNA

<213> Homo sapiens

<400> 505

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<210> 506

<211> 365

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (361)

<223> n equals a,t,g, or c

<400> 506

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<210> 507

<211> 2059

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 507

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ctgctagaag cactttatgt ttccctttttg ggtgaaatgg atttatgtga gtgctttaaa 1980
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<210> 508

<211> 1337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 508

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ggttcagacc cctttgtgaa aatccagctg gtgcatggac tcaaacttgt gaaaaccaag 360
aagacgtcct tcttaagggg cacaattgat ctttctaca atgaatcctt cagcttcaaa 420

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gttccccaag aagaactgga aaatgccagc ctagtggtta cagttttcgg ccacaacatg 480
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gagaccaacc actggaggcg catgctcaac acgcaccgca cagccgtgga gcagtggcat 600
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<210> 509

<211> 731

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 509

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attctcccca tttccaaacc atgatatgaa tgggcgctga catgtggaga gaatagataa 180
tttgtgtgtt tgcaatgtgt gttttagata aataggattg ggtatttaaa ttagcatttg 240
tgaatttaat agcatthaaga ttaccttcaa atgaaaaaaaa atctcaaaat ttctatttgg 300
tttttgtgca ttttctttta aaatgtaatc atatgatttt agtgtgttag acttgctgag 360
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ccataggttt tgggtgtaaa gaatgtttac tgccctccat ttaaattctg aaaagggatg 480
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ccattaagcc tgctatatct gagcaaatta atgggtacct tttttttctt atttaaagca 600
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cttcttgggg g 731

<210> 510
<211> 944
<212> DNA
<213> Homo sapiens

<400> 510
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tattgcacgc aagcgggcca agatccccgg gaaagcatag gccgtgcccc gaccggactg 840
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<210> 511
<211> 517
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c

<400> 511
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gagtagcgca gggctctcgag ctgtggccgt ggacttaggc aacaggaaat tagaaatc 180
ttctggaaaag ctggccagat ttgcagatgg ctctgctgta gtacagtcag gtgacactgc 240
agtaatggct acagcggta gtaaaacaaa accttccct tccagttta tgccttgggt 300
ggttgactac agacaaaaag ctgctgcagc aggtagaatt cccacaaact atctgagaag 360
agagrttggg acttctgata aagaaattct aacaagtcga ataataagatc gttcaattag 420
accgctyttt cmagctggct acttctatna tacacaggtt ctgtgtaatc tgtagcag 480
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<210> 512
<211> 3651
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature

<222> (1283)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3650)

<223> n equals a,t,g, or c

<400> 512

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<210> 513

<211> 1936

<212> DNA

<213> Homo sapiens

<400> 513

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tatgaggagg gcaagatggt ggtccatttt gagcgtgga gtcatcggtta tgatgagtgg 180
atttactggg atagcaatag attgcgaccc cttgaragac cagcactaag aaaagaaggg 240
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gttcagtttt atgatggagt aattcgttgt ttaaaaagaa tgcacattaa agccatgccc 420
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aagaacaaaa cagggagtaa acctcgaacc agcgctaaca gcaataaaga taaggataaa 540
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tctcagcttt cttcttcagt gataaataaa actagtctc cacagcctgt gaatccccct 1140

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<210> 514

<211> 1177

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 514

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tgctgtgtct ggcacttcat tgtacagact tttataataa aagaacttga aagttctaaa 1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg gggggggg                                     1177

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<210> 515

<211> 932

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (864)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (880)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (912)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (921)

<223> n equals a,t,g, or c

<400> 515

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gaggacggtt ccttgatat caccagagt attgaagacg acccacttct ggatgccag 180
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<210> 516

<211> 1159

<212> DNA

<213> Homo sapiens

<400> 516

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<210> 517

<211> 2451

<212> DNA

<213> Homo sapiens

<400> 517

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<210> 518

<211> 989

<212> DNA

<213> Homo sapiens

<220>

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<222> (336)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (891)

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<220>

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<222> (910)

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<222> (913)

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<222> (926)

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<220>

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<222> (947)

<223> n equals a,t,g, or c

<400> 518

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<210> 519

<211> 3315

<212> DNA

<213> Homo sapiens

<400> 519

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<210> 520

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2121)

<223> n equals a,t,g, or c

<400> 520

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<210> 521

<211> 2521

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2516)

<223> n equals a,t,g, or c

<400> 521

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<211> 1303
<212> DNA
<213> Homo sapiens

<220>
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<222> (1279)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1286)
<223> n equals a,t,g, or c

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<210> 523
<211> 1100
<212> DNA
<213> Homo sapiens

<400> 523
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tttactaac ttctggactt tccagctctt ccgaagtctg ttcttgccga aagcccaaag 180
gctggaaaac cgtccacgat gaccagcatg actcagtctc tgcgggagggt gataaaggcc 240
atgaccaagg ctgcgaattt tgagagagtt ttgggaaaga ttactcttct ctctgctgct 300

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<210> 524

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 524

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attttgaaca aggccttatt ctttcaggaa gacaactaat ggatgatagc aagttcatcc 180
acttactggg cttgtgccat gagcaaaatt caaagtcctg tatactcttc attgtagatt 240
tttaaatact ccttttccta aaaaactcaa ggggttaaaa attgctatit tatattttta 300
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cccaaattac gttccttttg acattttcct catctgctgt ttgtgacaag tcatcagcca 420
gatttctctg ctgacacata ggtatgatca gtgcaggaga gacctgcgca ccacaggctg 480
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ctttgctgtg caagaagaca ctgctttgct atatttaaaa tggctttttt aaaagagatt 1740
tatgtatttg gtaaatgttt gtagtcaaca gtccacacaa gaagctgtac acggtttgat 1800

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catgtaaaac cgtttggcgg cacaagctgg actttgttgc catccttgag atgaaccttt 1860
taagaaaaat aagttaatct caatttttcc ctgaatgtgt tgtttttctt cattatacaa 1920
taaataataat agtgaacttt ttaaaaaaaaa aaaaaaaaaa aaa 1963

```

<210> 525

<211> 794

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (782)

<223> n equals a,t,g, or c

<400> 525

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ggagagaaaa gaatgggttcc ytttgttccc sgcttattat cgtattagac agcgaaaatt 120
caacccttg ggtgaaagaa gtgaggaaaa ttaatgacca gtatattgca gtgcaaggag 180
cagagttgat aaaaacagta gatattgaag aagctgacct gccacagcta ggtgacttta 240
caaaagactg ggtagaatat aactgcaact ccagtaataa catctgctgg actgaaaagg 300
gacgcacagt gaaagcagta tatggtgtgt caaacgggtg gaggactac actctgcatt 360
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ccctagtgca ttgggcaaat tggttatgcg gtctgaacct tttttggatc tgcaaaactt 480
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ctcactactac caattatcac taacttgcca tttttgtat gctgtatttt tatttgtgga 660
aaataccttg ctacttctgt agcctgctct cactttgyct ttycttaagg taattatggg 720
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cngtaaatgc ctaa 794

```

<210> 526

<211> 2599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2461)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (2475)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2500)
<223> n equals a,t,g, or c

<400> 526

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taccagcctt tgggaagtcg tgtgaatacc tcggtctctt agccacaggg atagaatggc 180
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gaggtggaaa acggacgatg tattactaag ctggaaaaca tgggggttctg agtgggacaa 420
ggattgatag aaagggttac aaaagatact gcaagggttca aggatgagtt agatatcatg 480
aagttcattt gtaaagattt ttggactacg gtattcaaga aacaaatcga caatctaagg 540
acaaatcatc agggcatcta tgtacttcag gacaacaaat ttcgcctgct tactcagatg 600
tctgcaggaa aacagtattt agaacatgca tctaagtatt tagcatttac gtgtggctta 660
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naatgaccca kggankakct matggacaca gaagttagan ccaaaataga acacaataga 2520
ggaacttcca aaatgaaaac aggtgtggag aaatgtgtgt gtggaaaaag ccgggggttcc 2580
aaataagttg gggttggtt                                     2599

```

<210> 527

<211> 1305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1293)

<223> n equals a,t,g, or c

<400> 527

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ggagaaacgg agccccaagg ctcggtact gaaagtcagc cccagcagc ctggaccttc 180
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cacgcagcta tggatccagc aggtgtccag cacccttagc accaggatgg acgtggtgca 360
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```

<210> 528

<211> 1631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1628)

<223> n equals a,t,g, or c

<400> 528

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gtcgggtgttc gggaagctgt tcggggcttg agggggtaag gccggcaagg gcggcccgac 180
ccccaggag gccatccagc ggctgcggga cacggaagag atgttaagca agaaacagga 240
gttcctggag aagaaaatcg agcaggagct gacggccgcc aagaagcacg gcaccaaaaa 300
caagcgcgcg gccctccagg cactgaagcg taagaagagg tatgagaagc agctggcgca 360
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tgataactga tagataactc attggaaacg tgcatacatt tatattcaga tgaaattatg 1560
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gggggggncc c 1631
```

<210> 529

<211> 1944

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<400> 529

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tgtgttgtca cagcaggaat aggttttctt ctgttggcct ccctttctc caccctggcc 420
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agagaacagg atggagaatg gaaggaaagc cccccaggct tcgtgaattg caagaaggga 780
```

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gcagcccccg ccagctgcc tcraatccc tccaggccar ttccagattc taaactgatt 1860
tttttcatga tattgtcaaa acagtgagga aacattaaaa aaaaagccct aaagcaaaaa 1920
aaaaaaaaa aaaaaaaaaa aaaa 1944
```

<210> 530

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1409)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1411)

<223> n equals a,t,g, or c

<400> 530

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tgatggcggc tatagctgca tccgaggtgc tgggtggacag cgcgaggag ggggtccctcg 120
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<211> 1466

<212> DNA

<213> Homo sapiens

<400> 531

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<210> 532

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 532

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<210> 533

<211> 2857

<212> DNA

<213> Homo sapiens

<400> 533

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<211> 1335

<212> DNA

<213> Homo sapiens

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<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1334)

<223> n equals a,t,g, or c

<400> 534

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<210> 535

<211> 2818

<212> DNA

<213> Homo sapiens

<400> 535

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<211> 1397

<212> DNA

<213> Homo sapiens

<400> 536

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<210> 537

<211> 1233

<212> DNA

<213> Homo sapiens

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<222> (1202)

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<210> 538
<211> 1016
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<400> 538
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gaattatttc tcatgctcat tttcttgCGg cagttatctt agaaagaccc ccaaaggctt 360
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<210> 539
<211> 1679
<212> DNA
<213> Homo sapiens

<400> 539
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gactggcaga tccgccaggt gcgggcgcta ctgcaggcac agcaggccta ggtcctccca 1620
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<210> 540

<211> 1080

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (970)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1027)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1044)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1067)

<223> n equals a,t,g, or c

<400> 540

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acaacattaa tgagaggacc acctgggtgc agaagatcaa ggcggcgtct gagcagtaca 180
tcgacaccga gaagaagaag cgtgagaaag cttaccaagc ccgctcccaa aagacttcag 240
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tctaccaaga cgtgctgtgt ctcacctgt ttgacagaga ccagttttca ccagatgatt 480
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<210> 541

<211> 2259

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2247)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2253)

<223> n equals a,t,g, or c

<400> 541

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gtttaaatca attaagtggc attggaaacc taggggttcc ttttgattaa gagccttttt 360
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<210> 542

<211> 1347

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1290)

<223> n equals a,t,g, or c

<400> 542

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tgcttctcag taccaatatg aagtgggtac agttttcaaa cctacacgtt gatgttccaa 180
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tgcttgctgc taaagaactt ggtatctcta ttaagtaga tgaacctcca aggaaaatag 360
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tgagaacact ttacagatgt ttagagttag aacatctaac tggaagcaca gcagatgtct 480
acttggataa tattcagcga aacttacctg aaggggttgc catggaagta acaaagacac 540

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gtggggccaga tgagtatgtt taagtggaga gtgcttccag ctgagatgat ttgagtctgy 720
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ctagttgtat tatttatcct atgattcatn cattcaataa gcttttactg cataaacttt 1320
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<210> 543

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 543

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attaacaaaa ataaactatt taaataawaa aaaagtcgac g 1901

<210> 544

<211> 842

<212> DNA

<213> Homo sapiens

<400> 544

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aggcggtgac taaggctcag aagaaggacg ggaagaagcg caagcgagc cgcaaggaga 180
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<210> 545

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (652)

<223> n equals a,t,g, or c

<400> 545

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taacatatcc aggagagctg cttctgcaag gtgttcatga tgatgttgac attatattac 420
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tatgtatgat gctataaaat aaatcctatt attttctmag natmtggttg anattctgcg 660
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<210> 546

<211> 2142

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (619)

<223> n equals a,t,g, or c

<400> 546

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catggggatc cggcctgcag gtttgacagag catgccaggg gactacgttt ctcagggttg 720
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gagttataac tactgtagta taaatatagg aactaagtta aacttgtaga tttctgttga 1260
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gttttcatgc ccggcctttg ttctccata aatgtgtcct ttagtttcaa acagatcttt 1560

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gcttgccaat gaagatttaa agacagagca ggagcttctt ccaggagttc tgagccttgg 1680
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aagaaaatgc tgttaccttt aagctttgtc aaatttacat taaaatactt gtatgaggac 2040
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tttttgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaactc ga 2142
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<210> 547

<211> 1893

<212> DNA

<213> Homo sapiens

<400> 547

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agcatgaatt ggaactgcaa tgaaagtcaa atttacttta aaaagaaatt aatatggctt 180
caccaagaag caaagttcaa cttatttcat aattgcctac atttatcatg gtcttgaatg 240
tagcgtgtaa gcttgtgttt cttgggcagt ctttcttgaa attgaagagg tgaaatgggg 300
gtggggagtg ggaggaaagg tgacttcctc tgggtgtttat tataaagctt aaattttata 360
tcatttttaa atgtcttggg cttctactgc cttgaaaaat gacaatttg aacatgatag 420
ttaaactacc acttttttta accattatta tgcaaaattt agaagaaaag ttattggcat 480
ggttggtgca tatagttaaa ctgagagtaa ttcactctgt aatctgcttt aattacctgg 540
tgagtaactt agaaaagtgg tgtaaacttg tacatggaat tttttgaata tgccttaatt 600
tagaaactga aaaatatcyg gttatatcat tctgggtgtg ttcttactga caccaggggt 660
ccgctgcccc atgtgtcctg gtgagaaaat atatgcctgg cacagctttt gtatagaaaa 720
ttcttgagaa gtaactgtcc gctagaagtc tgtccaaatt taaaatgtgt gccatattct 780
ggttcttgaa aataagattc cagagctctt tgatcgcttt taataaactg caagttcatt 840
ttaaatgaag ggccagcata tatacttgca agataatttt cagctgcaag gattcagcac 900
cagttatgtt tgaatgaacc ctcttttct ctgagattct ggtccctgga aatccctttc 960
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gtaattcttt tctgtttctg tttataatga agaactgt agctacattt tcagaagtta 1200
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cagtcttatt taaccagggg tcctaaccac taacattgtg actttgcttt gagacctttc 1740
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ctgatgccac taccgatttt gtttatttgc aatttgagcc atttaaagac caataaactt 1860
ccttttttaa aaaaaaaaaa aaaaaaaaaa aaa 1893
```

<210> 548

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<400> 548

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ccagttctta cttgcctgtg cagactttga ggggaagggt gtgaagactt cggttgtgtt 180
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tgtggttgac agcgctgccc tcgatgtggt catgaaggaa tggcatacca caccagacag 300
atgcgttcag ccgatgaagg gcaaactgtc ttctacacct gtaccaactg caagttccag 360
gagaaggaag actcttgacc tttttcctgg gcaactctrc agtccctccc tcctttcgga 420
aggtgaagga tactggggtt ttagatgcct tgtccatcct gtctgggtgc aatgttttgc 480
tcccagaaga gaatcagatc atcatgtggg gattaccatt gttcctggag tactcctacc 540
cttagttgaa tttccttatt aaagttatat ttttctataa gaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     630
```

<210> 549

<211> 586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (510)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (514)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<400> 549

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ggcacgaagc cgcgtttgta ctgtgtctta ccatgcctga accggcaaaa tccgctccgg 60
cccctaaaaa gggctccaag aaagccgtca ccaaagccca gaagaaagac ggcaagaagc 120
gcaagcgcag ccgcaaagag agctactcca tctacgtgta caaggtgctg aagcagggtcc 180
accccgcacac cggcatctcg tccaaggcca tgggcatcat gaactccttc gtcaacgaca 240
tcttcgagcg catcgsggga gaggttccc gcctggcgca ctacaacaag cgctccacca 300
tcacatcccc cgagatccag acggccgtgc gcctgctgct gcccggcgag ctggccaagc 360
acgccgtgtc cgagggcacc aaggcgggtca ccaagtacac cagctccaag tgagtccctg 420
ccgggacctg gcgctcgctc gctcgagtcg ccggtgctt gactycaaag gctcttttca 480
garccaccca cctaatact agaaaarnan cttngttcac ttaatttccc ctttaatttc 540
ttttccata aaargttaag ttaattttta agnggtgaaa ggntca 586
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<210> 550

<211> 1586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1585)

<223> n equals a,t,g, or c

<400> 550

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gcagctgaag cacatccgc agcccggcgc ggactccgat cgccgcagtt gccctctggc 120
gccatgtcgc agaacggagc gcccgggatg caggaggaga gcctgcaggg ctccctgggtta 180
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aatggagaca tggaaaaaat actgctggac gcacagcatg agtctggacg gagtagctcc 300
aagagctctc actgtgacag cccacctcgc tcgcagacac cacaagatac caacagagct 360
tctgaaacag ataccatag cattggagag aaaaacagct cacagtctga ggaagatgat 420
attgaaagaa ggaaagaagt tgaaagcatc ttgaagaaaa actcagattg gatatgggat 480
tgggtcaagtc ggccgaaaaa tattcccccc aaggagtcc tctttaaaca cccgaagcgc 540
acggccaccc tcagcatgag gaacacgagc gtcattgaaga aagggggcat attctctgca 600
gaattttctga aagttttcct tccatctctg ctgctctctc atttgctggc catcggattg 660
gggatctata ttggaaggcg tctgacaacc tccaccagca ccttttgatg aagaactgga 720
gtctgacttg gttcgttagt ggattacttc tgagcttgca acatagctca ctgaagagct 780
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gatcaataag catgtcagac tgattaatgt ctactgtgaa aatttggtag taaattttca 960
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ggccttatat atcacactat tgtagaaagt attatttaat ttaaattggat gcagggtgtc 1200
tactaaagaa agattatata taactatgct aattgttcat aatcaacaga aaccaagata 1260
gagctacaaa ctacagctgta cagttcgtac actaaactct tcttgctttt gcattataag 1320
gaattaagtc tccgattatt aggtgatcac cctggatgat cagttttctg ctgaaggcac 1380
ctactcagta tcttttcctc tttatcactc tgcattgggtg aatttaatcc tctcctttgt 1440
gttcaacttt tgtgtgcttt taaaatcagc tttattctaa gcaaactctgt gtctacttta 1500
aaaaactgga aatggaaaaa aaaataaatc tttgccaaat cctaaaaaaaa aaaaaaaaaa 1560
ymgggggggg cccnggancc aattnc 1586

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<210> 551

<211> 2143

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2086)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2097)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2140)

<223> n equals a,t,g, or c

<400> 551

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cgtttgagg gtcacaaaaga agggattgta cagactgaac agattagggtc tttgtctgaa 180
gctatgtcag tggaaaaaat tgctgcaatc aaagccaaaa ttatggctaa gaaaagatct 240
actatcaaga ctgatctaga tgatgacata actgccctta aacagaggag ttttgtggat 300
gctgaggtag atgtgacctg agatattgtc agcagagaga gagtatggag gacacgaaca 360
actatcttac aaagcacagg aaagaatttt tccaagaaca tttttgcaat tyttcaatct 420
gtaaaagcca gagaagaagg gcgtgcacct gaacagcgac ctgccccaaa tgcagcacct 480
gtggatccca ctttgcgcac caaacagcct atcccagctg cctataacag atacgatcag 540
gaaagattca aaggaaaaga agaaacggaa ggcttcaaaa ttgacactat ggggaacyta 600
ccatggtatg acactgraat ctgtaacgga ggggtgcatct gcccggaaga ctcagactcc 660
tgacgcccag ccagtaccaa gaccagtctt tcaagcwaga cctcccccaa atcagaagaa 720
aggatctcga acaccatta tcataattcc tgcagctacc acctctttaa taacctgct 780
taatgcaaaa gaccttctac aggacctgaa atttgtccca tcagatgaaa agaagaaaca 840

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gcctcaagac tgggaccgag ttgtagccgt ttttgtgcag ggcctgcat ggcagttcaa 1020
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attgaactgt tcagcctttt caagatttct ttatttacia atgattacat ttaaatgaat 1860
gtacattctt ctcactgact ttggtgattt tgaaacctag aatgatgtgt ttctatctgt 1920
aatatctttc catttgaaaa aaatctcaaa acacagatta aaaccacaat aggctgtagt 1980
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```

<210> 552

<211> 1634

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1509)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1608)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1623)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1629)

<223> n equals a,t,g, or c

<400> 552

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tctggcggct cgtgggggtg ttgggggtccg cagggggagg gaggggagtg tcagagtgtg 180
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agagcatgaa gcaggagctg cagaacctgc gcgatgagat caaacagctg gggagggaga 540
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gtnaacaanc cggtg                                     1634
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<210> 553

<211> 278

<212> DNA

<213> Homo sapiens

<400> 553

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cgacagtggc ctgaccatcg agaagtcctg gagggagctg gtgcctgggc acaaggagat 180
gagccaggag ctytgccacc aacaggaggc cctgtggrag ctcctgacca ccgagctgat 240
cttacgtgag aaagcttcaa gatcatgaac tgatcttg 278
```

<210> 554

<211> 2658

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2128)

<223> n equals a,t,g, or c

<400> 554

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tatgatacca caattagaac tggcagagca ctgaaagaaa agactttgct tcccgaagat 180
astcagaaac ttgacaattt cctaggagaa gtcagagaca aatgggatac tgtttgtggc 240
aagtctgtgg agcggcagca caagttggag gaagccctgc tcttttcggg tcagttcatg 300
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cagcccgtgc acgggggacc ttgacctcgt catgaacctc atggatgcac acaaggtttt 420
ccagaaggaa ctggggaaaag cgaacaggaa ccgttcaggc cctgaagcgg tcaggccgag 480
agctgattga gaatagtcga gatgacacca cttgggtaaa aggacagctc caggaaactga 540
gcactcgtct ggacactgtc tgtaaaactct ctgtttccaa acaaagccgg cttgagcagg 600
ccttaaaaca agcggaaagt tttcgagaca cagtccacat gctgttgagg tggctttctg 660
aagcagagca aacgcttcgc tttcggggag cacttcctga tgacacagag gccctgcagt 720
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cacggatcaa ccagctttct gcccgctggc ancagggtgtg gctgttagca ctggagcggc 1320
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tggatttctt cgggcgcatt gataaggacc aggatgggaa gataacacgt caggagttta 1500
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<210> 555

<211> 1728

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 555

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<211> 3355

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c

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<211> 1079

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<211> 724
<212> DNA
<213> Homo sapiens

<400> 558

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<210> 559

<211> 3125

<212> DNA

<213> Homo sapiens

<400> 559

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<210> 560

<211> 2645

<212> DNA

<213> Homo sapiens

<400> 560

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<210> 561

<211> 1717

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<400> 561

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tcagtgggtca atacaatagt ccaccaagag actgggaatr attagaagtg aaattgggtcc 180
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gatggggggt cagtgcacct gtttgccctt taccagctg tggtttattc tgcttgatg 660
```

```

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ggccatttta ctacaaaaaa aaaaaaaaaa aaaaaaa 1717

```

<210> 562

<211> 2417

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2362)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2398)

<223> n equals a,t,g, or c

<400> 562

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ccaacgacca agtcaccaag gatgctgcag aagctataaa gaagcataat gttggcgta 480
aatgtgccac tatcactcct gatgagaaga gggttgagga gttcaagttg aaacaaatgt 540
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ttatctgcaa aaatatcccc cggcttgtag gtggatgggt aaaacctatc atcataggtc 660

```

```

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atttctcaga aattgatatt aaacactatc ttatcttctc ctgaactgtt gattttaatt 2340
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ggggccaagt tacgcgg                                     2417

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<210> 563

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 563

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gttataaaac cgccacagtc ttcaatccag atttgaagac tcatgccata ggtgacattc 180
taaaatacca ttaaagccac ttaaagtgtt aataagaata tacatgcaca tcagctcaat 240
gtctttgagt attaatTTtT tgtaagcatt ctatttTaaC tgaatatagg acaaTcatg 300
gctatatcta tagaccttg ataaactgga ttgaccaatt atacactcac ggtgactttt 360
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ctggccgcac ctgaacatag ctggtgctta tgccgagtta tttgygatga gtaaataTtt 600
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gcttataamt tactcatctc trtctttacc agcaggctct gtattgttga tatttgcaac 720
ttgttttgct tttccattgg tggaattgaa ataattagtt tttaattaca taagatgcct 780
gtttgctatt tgggtggaaga tagatgttca tattgaagca gtcacatttg tactgtagtt 840

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```

<210> 564

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (180)

<223> n equals a,t,g, or c

<400> 564

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ccccccccc cgccctttt ttttytytyt gcaaaaccat tttttgggct gataacgtat 240
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tgcccacaaa tggatttata atgcttgctt agtcaaagaa gagagactaa acaagggtaa 1320
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```

aaattttaac agtacagaat ttgccatcat atcattgcct tgattctaac tgtttgtgtc 1380
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gtttgggagt tttttgcgct tgttatgtgg aaataaagtg tttgatttaa aaaaaaaaaa 2280
aaaaaaaaaa aaaaaaaaaa 2299

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<210> 565

<211> 364

<212> DNA

<213> Homo sapiens

<400> 565

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gggctgtgca gcagcaatgg ccctaaggat gctctgggct ggacaggcca aggggatcct 180
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cagcaagtgc tacttccaag ctcaagcccc ctgtcactat gaggggaaat attttaccct 300
gggtkartct tggctccgca aggactgttt ccattgcacc tgtctgcac cgtgtgcgtg 360
ggct 364

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<210> 566

<211> 2481

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1214)

<223> n equals a,t,g, or c

<400> 566

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cgatgtcccc ggcgtcggcc aggtccggg ccgggtagcc ttcgtctcgg agccggggcg 120
cttctcctac gccgactttg tgcggggcct cttgctgccc aacctgccct gcgtgttttc 180

```

```

cagcgccttc acgcagggct ggggcagccg gcggcgctgg gtgacgcccg cggggaggcc 240
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aacaaaaaaa aaaaaaaaaa a 2481

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<210> 567

<211> 1364

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1362)

<223> n equals a,t,g, or c

<400> 567

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aaaagatgaa acggaccctt ttaaaagatt ggaagaccgg tttgagctac ttcttacaaa 180
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<210> 568

<211> 1606

<212> DNA

<213> Homo sapiens

<400> 568

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```

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ttgtattcaa acaattatgc cactcgatgc aacaaacata ataaatacat aaaagattta 1560
aaaaawaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggggg 1606

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<210> 569

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 569

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aaaaa

```

<210> 570

<211> 1144

<212> DNA

<213> Homo sapiens

<400> 570

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ccgtttccag agccgcggcc ctacgggctg ggaagacggg gacaggccac agccttcctc 180
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cttcacagga gaaaggagac ccaaagatga ccaagtgttt gaagccgtgg gaactacaga 300
tgaattaagt tcagctattg ggtttgctct ggaattagtc acagaaaagg gccatacatt 360
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```

```

accatgctcc tcggcccgagg aggtcactt aaagtatacc acgttcaagg cggggcccat 480
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aaaa 1144

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<210> 571

<211> 2754

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2610)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<400> 571

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gcggggtgcc caggcctgga ggaactctac cttgagtcta acaacatttt catttccgaa 840
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agacgctgaa caaatgtgag attctccccg aggagaggcg gagagctgag cttgactacc 1260

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<210> 572

<211> 2657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1285)

<223> n equals a,t,g, or c

<400> 572

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tgtagggcct gctgggtgtt gctagccgct ggtccccagg cacggtgcac tttctccacc 780
tctgcagcc tccctgttgt ttctagactc ttgcacctgg tgagtgcagg gataggtgac 840

```

```

ccaggggcct gcagccttgt cctcagctcc catctcctgg actgccagcc tcaccctctg 900
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```

<210> 573

<211> 2352

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 573

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aaaaagtcga cc 2352
```

<210> 574

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 574

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ccgcagcagt ggatagaggt gcagatct 328
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<210> 575

<211> 1678

<212> DNA

<213> Homo sapiens

<400> 575

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<213> Homo sapiens

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<211> 1244

<212> DNA

<213> Homo sapiens

<400> 578

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<211> 4006

<212> DNA

<213> Homo sapiens

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<210> 581

<211> 565

<212> DNA

<213> Homo sapiens

<400> 581

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gctgctgatc attttttctt taaaacttgg atagattcca aaagttacag tacctttgtg 480
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<210> 582

<211> 2528

<212> DNA

<213> Homo sapiens

<400> 582

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<210> 583

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (465)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<400> 583

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tcagctacaa aggtaatatt gtattaaaat catgtttaag atagctgctt ttatgtgtat 360
tttatattgc atgcttttgt aaaaacatgc tgggtgatga aagattagtt ttagagagaa 420
aatgttcatac tgtgcagagg atgcatttct tccattaatt ctggnaaaaa ckttttttcc 480
ctttnggggg ggnaaaaaaa naaaaaa 507
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<210> 584

<211> 1931

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 584

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ccccagarta atggtttctt gactttctgt agcccttggt ccttagtctg ctgtgatatt 180
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ccgaaagggc agatccaata gaagaccgc tccttaaata aacataaaat gtaaaaagtt 540
ggaaaattaa gagtaatgtt ccatctggaa actgaacttt tgccttgaa cttgtgttg 600
caccaagcct catacacagt gagctcaata actgttggga caaaggaagg aaggacaaaa 660
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aacagggaat ncttccagtc ctgttttttt aaaaaacnt taaactnttg ttctttaatt 1920
```

cccaagtccc c

1931

<210> 585

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1018)

<223> n equals a,t,g, or c

<400> 585

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cccgccaaaga gagccccaga gcagaggaaa atccaaagtg gagagagggg aagaaagaga 180
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gaaaatttgc agctgccttc ttggcattca ttttcatact ggcagctgtg gatactgctg 420
aagcagggaa gaaagagaaa ccagaaaaaa aagtgaagaa gtctgactgt ggagaaatggc 480
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ggactggagc tgagtgaag caaaccatga agaccagag atgtaagatc ccctgcaact 600
ggaagaagca atttggcgcg gagtgaat accagttcca ggctgggga gaatgtgacc 660
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gccagaagac tgtcaccatc tccaagccct gtggcaaaact gaccaagccc aaacctcaag 780
cagaatctaa gaagaagaaa aaggaaggca agaaacagga gaagatgctg gattaaaaaga 840
tgtcacctgt ggaacataaa aaggacatca gcaaacagga tcagttaact attgcattta 900
tatgtaccgt aggcctttgta ttcaaaaatt atctatagct aagtacacaa taagcaaaaaa 960
caaaaaaaaaa aaaaaaaaaa ctcgaggggg ggtcccgtac ccaatngccc tctcatgnat 1020

<210> 586

<211> 767

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<400> 586

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tctgcccttt tgaagaaaag acaaaggtag aaaggatggt ggaggactac ctggcaagtg 300
gttatcaggt aagcagaaaa cgtactgttg ttaaaaaatga yatgctttca tccaataggt 360
agacagawtt ctttctagac agactcatct tcagagtttt cttagagcaa atgaagcctt 420
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agtgtgckgc atagacacca atgggacagg aagagctcct armctgggtg tgctgagatm 720
aagygtaaag agtgtgcagt ggstcatgcc tgtaattccc tcgtgcc 767
```

<210> 587

<211> 847

<212> DNA

<213> Homo sapiens

<400> 587

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gtagtag 847
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<210> 588

<211> 2158

<212> DNA

<213> Homo sapiens

<400> 588

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<210> 589

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 589

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<210> 590

<211> 2180

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1353)

<223> n equals a,t,g, or c

<400> 590

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<210> 591

<211> 1193

<212> DNA

<213> Homo sapiens

<400> 591

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<210> 592

<211> 2002

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1914)

<223> n equals a,t,g, or c

<400> 592

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taaatttgaa taagcagaac atactgttct caacatactg taatcaaaag gggnaatttc 1920
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<210> 593

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 593

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agttgggaaa tcctagagca accatatctg ttactttcca tcctgggttat atttcttaat 180
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tcttttgccc acaagattat gtgattgacc aatcaatttt ttgtggaaaa gccctaggga 360
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ggagtgggtc ttagtatcct caggctgttk ccattctgct cctgctgtca attttcaagc 480
tyaccagtat catgtgaata aattggtaaa gattagagag tcctgaatca taagctctta 540
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<210> 594

<211> 333

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<400> 594

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cgagaccac catccttcca tcctgaggac cgccccaaacc ctcggagccc cccactcagt 240
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gcttccttaa ggaacctttc aaccaaancc ttc 333
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<210> 595

<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (585)
<223> n equals a,t,g, or c

<400> 595
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atgcatccga gtttgaaaac ccactttaag ggatggagcc tgggggatca cattaacgg 180
aaaatgccaa cgacttctac cacctctacg cgtttttagt ttttcatttt ctcgaaggaa 240
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<210> 596
<211> 532
<212> DNA
<213> Homo sapiens

<400> 596
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gaattttaaa aaatcaattt tattgagtta taattaacat acagtaaaaa tgctcccatc 120
ttgagtaatt ccatgccttt tgacaagtgt tctgtaccca tgccacgacc accacaatcg 180
agagagaaca tcttcatcac tccagaaggg ctccctttgca gtgagtactc cctaggagtt 240
ccagcggccg gtgacattga tctgttttct gtcactgtag atgagatttg tctgttatat 300

acaattttta aaaattaaat gatatgtatg gcttcttttg cttagcataa tgtttttgag 360
cttattcatt tggtgcatat atcaatactt tgcttctttt taccacctgt acttcattta 420
tggatacgtt gtttatccat gtgtttatcc ccaatggaca ttgggttggt tctgattttt 480
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<210> 597

<211> 1494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1483)

<223> n equals a,t,g, or c

<400> 597

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<210> 598

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 598

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atgaggggtat atattcggag ygagcgcggg acscgatgag tggccgcgcg gaaggagctg 180

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gagacggtcg tagctgcggt cgcgccgaga aaggttttaca ggtacatata ttacacccct 240
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<210> 599

<211> 1273

<212> DNA

<213> Homo sapiens

<400> 599

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gagtttttta attgagaagt ttaattcaga agtttggttt tgttgctctt gatttaacat 180
tttatatttc ttttgaaaaa tttccaacag agctcaaagt atacttttcc cacagcaatg 240
cacattgctg ctgcaataga agttcatgaa gtactgttac caggactaca gaagttacat 300
gatgctcttg atgcaaaatc caaagagttt gcacagatca tcaagattgg acgtactcat 360
actcaggatg ctgttccact tactcttggg cagggaattta gtggttatgt tcaacaagta 420
aaatatgcaa tgacaagaat aaaagctgcc atgccaaaga tctatgagct cgcagctgga 480
ggcactgctg ttggtacagg tttaaatact agaattggct ttgcagaaaa ggttgctgca 540
aaagtggctg cacttacagg cttgcctttt gtcactgctc cgaataaatt tgaagctctg 600

```

```
gctgctcatg acgctcttggg tgagctcagt ggagccatga acactactgc ctgcagtctg 660
atgaagatag caaatgatata tcgatttttg ggttctgggc ctcgggcagg tctgggagaa 720
ttgatcttgc ctgaaaatga accaggaagc agtatcatgc caggcaagggt gaaccctact 780
cagtgtgaag caatgaccat gggtgcagcc caagtcattgg ggaaccatgt tgctgtcact 840
gtcggaggca gcaatggaca ttttgagtgg aatgttttca agccaatgat gattaaaaat 900
gtgttacact cagccagggt gctgggggat gcttcagttt cctttacaga aaactgcgtg 960
gtgggaatcc aggccaatat agaaaggatc aacaagctga tgaatgagtc tctaattgtg 1020
gtgacagctc tcaatcctca tatagggtat gacaaggcag caaagattgc taagacagca 1080
cacaaaaatg gatcaacctt aaaggaaact gctatcgaac ttggctatct cacagcagag 1140
cagtttgacg aatgggtaaa acctaaggac atgctgggtc caaagtgatt tacataaatt 1200
tataatgaaa ataaacatgt ataaaattta aaaaaaaaaa aaaaaatcgg ggggggggcc 1260
ccgtacccat tgg 1273
```

<210> 600

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 600

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ctttgctgtt caccagatgt aatgttttag ttccttaca acaggggttg gggggggaag 120
ggcgtgcaaa aactaacatt gaaattttga aacagcagca gaggtagtgg attttatttt 180
tcgttattgt tgggtggtta aaaaattccc ccatgtaat tattgtgaac accttgcttt 240
gtggtcactg taacattttg ggggtgggac agggaggaaa agtaacaata gtccacatgt 300
ccctggcatc tgttcagagc agtgtgcaga atgtaatgct cttttgtaag aaacgtttta 360
tgatttttaa aataaattta gtgaacctat ttttggtggt cttttttttt ttaagacagt 420
cattttaaaa tgggtggctga atttcccaac ccaccccaa actaaacact aagtttaatt 480
ttcagctcct ctgttggaac tataagtga tctcttggtg gacataggca aaataacttg 540
gcaaacttag ttctgggtgat ttcttgatgg ttggaagtc tattgctggg aagaaattcc 600
atcatacata ttcatgctta taataagctg gggatttttt gtttgttttt gcaaattgctt 660
gcccctactt ttcaacaatt ttctatgtta gttgtgaaga actaagggtg ggagcagtag 720
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atcagaataa cacttggtta tgggaagtga taatgctgaa aaaattgatt atttttatta 840
gataatttct cacctataga cttaaactgt caatttgctc tagtgtctta ttagttaaac 900
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taaaattcac ttccaaataa ataaaacacc catgatgcta gatttgatgt gtgccratt 1140
tgaacaaggg ttgattgaca cctgtaaaat ttgttgaaac gttcctctta aaaggaaata 1200
tagtaatctt atgtaaaaaa aaaaaaaaaa aactcgaga 1239
```

<210> 601

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 601

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aattcggcac gagtttgtat tttgagtaga gacagggttt caccgtgttg gctaggatgg 60
tgtctatctc ttgaccttgt gatccaccgc cctcagcctc ccagagtgtt gggattacag 120
gtgcgagcca ctgcgcctgg ctggttttca tgaatcttga tagacatcta taacgttatt 180
attttcagtg gtgtgcagca tttttgcttc atgagtatga cctaggtata gagatctgat 240
```

```
aacttgaatt cagaatatta agaaaatgaa gtaactgatt ttctaaaaaa aaaaaaaaaa 300
aaaatttcta cattataact cacagcattg ttccattgca ggttttgcaa tgtttggggg 360
taaagacagt agaaatatta ttcagtaaac aataatgtgt gaacttttaa gatggataat 420
agggcacatg ctgagtgcctg ctatcttgaa atgtgcacag gtacacttac cttttttttt 480
ttttttttta agtttttccc attcaggaaa acaacattgt gatctgtact acaggaacca 540
aatgtcatgc gtcatacatg tgggtataaa gtacataaaa tataatctaac tattcataat 600
gtgggggtgg taatactgtc tgtgaaataa tgtaagaagc ttttcaacta aaaaaaatgc 660
attactttca cttaacacta gacaccaggt cgaaaatttt caaggttata gtacttattt 720
caacaattct tagagatgct agctagtgtt gaagctaaaa atagctttat ttatgctgaa 780
ttgtgatttt tttatgccaa attttttttt gttctaataca ttgatgatag cttggaaata 840
aataattatg ccatggcatt tgacagttca ttattcctat aagaattaaa ttgagtttag 900
agagaatggt ggtgttgagc tgattattaa cagttactga aatcaaatat ttatttgta 960
cattattcca tttgtatttt aggtttcctt ttacattctt tttatatgca ttctgacatt 1020
acatattttt taagactatg gaaataattt aaagatttaa gctctggtgg atgattatct 1080
gctaagtaag tctgaaaatg taatattttg ataatactgt aatataacctg tcacacaaat 1140
gcttttctaa tgttttaacc ttgagtattg cagttgctgc tttgtacaga ggttactgca 1200
ataaaggaag tggattcatt aaactaaaaa aaaaaaaaaa aaaaaaaaaa aaaagtcgac 1260
cggccgggta tttagtagta gtaggc 1286
```

<210> 602

<211> 404

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 602

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tcgaccacag cgtccgccca cgcgtccgcc cagcgcgccg ggaagcccat acataacagt 60
ggaggtgttt tgtctaacca tcaaaatggt tgagactttt ttttaaacad ttctgagttc 120
gaaggtaata ctgacagatt tcttccctct tccctcccca tcaccacact cagtataaac 180
acattactga tagaggaagt cattagaatc atttttaagt ttcagatata ggagacttca 240
tgcaatttgg agataagact aattattggg ggttttcctt ggattttttt ttttaataact 300
gggggctatt ttatcagctt gcctattaaa ggactatggt aagtatagaa tcttaatggt 360
tgccagttag taattctttt tttttttttt ttactgtana caca 404
```

<210> 603

<211> 1168

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1133)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<400> 603

```

ggcgccggcg tgggtgcgt ctccggcggt tgaattgcgc ttccgccatc tttccagcct 60
cagtcggacg ggcgcggaga cgcttctgga aggaacgccg cgatggctgc gcagggagag 120
ccccaggtcc agttcaaaact tgtattgggt ggtgatgggt gtactggaaa aacgaccttc 180
gtgaaacgtc atttgactgg tgaatttgag aagaagtatg tagccacctt ggggtgttgag 240
gttcatcccc tagtgttcca caccaacaga ggacctatta agttcaatgt atgggacaca 300
gccggccagg agaaattcgg tggactgaga gatggctatt atatccaagc ccagtgtgcc 360
atcataatgt ttgatgtaac atcgagagtt acttacaaga atgtgcctaa ctggcataga 420
gatctggtac gagtgtgtga aaacatcccc attgtgttgt gtggcaacaa agtggatatt 480
aaggacagga aagtgaaggc gaaatccatt gtcttccacc gaaagaagaa tcttcagtac 540
tacgacattt ctgccaaaag taactacaac tttgaaaagc ccttcctctg gcttgctagg 600
aagctcattg gagaccctaa cttggaattt gttgccatgc ctgctctcgc cccaccagaa 660
gttgtcatgg acccagcttt ggcagcacag tatgagcacg acttagaggt tgctcagaca 720
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gtctagtttt ataggcagct gtccgtgat gtcagcgggt cagcgtgtgt gccacctcat 840
tattatctag ctaagcggaa catgtgcttc atctgtggga tgctgaagga gatgagtggg 900
cttcggagtg aatgtggcag tttaaaaaat aacttcattg tttggacctg catatttagc 960
tgttttggaa cgcagttgat tccttgagtt tcatatataa gactgctgca gtcacatcac 1020
aatattcagt ggtgaaatct tgtttgttac tgtcattccc attccttttc gtttagaatc 1080
agaataaagt tgtatttcaa atatctaaaa aaaaaaaaaa nngggggggs cgnccattcc 1140
ccaaaggggg gtntaaaaccc gggggggtt 1168

```

<210> 604

<211> 458

<212> DNA

<213> Homo sapiens

<400> 604

```

ggcggccgtg gcgcgggtgg cggctgctgt gctggctgtg gggacggagg cgggtgaagtg 60
ccatcttcgg ctaggtcgtc acaggctccg gctcatggca tcaagtggca tccatcataa 120
gatcgtaaac tgaagacaat atgcaaaatt ctacatgga tgaatacaga aattctagta 180
atggcagcac aggcaacagt tcagaggtag tggtagaaca tcctactgat ttcagtactg 240
agattatgaa cgttacagaa atggaacagt cacctgatga ctctcccaat gtgaatgcat 300
ctacagaaga aactgaaatg gcaagtgtg tggaccttcc agtgacgtg acagaaacag 360
aagcaatttc cctccagaat atgaaaaatt ttggaaaact gtagaaaata atcctcaggt 420
tttaaaggct gggatatatt gcctcaatat gtagaaca 458

```

<210> 605

<211> 911

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (897)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (904)

<223> n equals a,t,g, or c

<400> 605

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cgacccacgc gtccggaccc acgcgtccgg ggaaaatggc gctggccatg ctggtcttgg 60
tggtttcgcc gtggtctgcg gcccggggag tgcttcgaaa ctactgggag cgactgctac 120
ggaagcttcc gcagagccgg ccgggctttc ccagtcctcc gtggggacca gcattagcag 180
tacagggccc agccatgttt acagagccag caaatgatac cagtggaagt aaagagaatt 240
ccagcctttt ggacagtatc ttttgatgg cagctcccaa aaatagacgc accattgaag 300
ttaaccggtg taggagaaga aatccgcaga agcttattaa agttaagaac aacatagacg 360
ttgtcctga atgtggtcac ctgaaacaga aacatgtcct ttgtgcctac tgctatgaaa 420
aggtgtgcaa ggagactgca gaaatcagac gacagatagg gaagcaagaa gggggccctt 480
ttaaggctcc caccatagag actgtggtgc tgtacacagg agagacaccg tctgaacaag 540
atcagggcaa gaggatcatt gaacgagaca gaaagcgacc atcctggttc acccagaatt 600
gacaccaaag atgttaaaag gataacttca cagtaaatac tttctcctga aatagaggaa 660
gattctttac gttgttgtgc ttgtttttaa atcatcagta tagtttaaca cattctttct 720
aagcagtttt gtgtgggata atttgaagaa tatattatga gtaaactccg aaaattttgt 780
ttatccaaag gctcaatgga ttatgtttct attatataca aggttttaag taaacataaa 840
atttcagaa caaaaataaa aaatttataa ttcatagcaa aaaaaaaaaa aaggggnggc 900
cgcnctaggg g 911
```

<210> 606

<211> 738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 606

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cccacgcgtc cgcccacgcg tccgcgcaga tggcggcggc gcacggcgcc tgagcggggc 60
ggggccatga gcgcgcgccg gcccagttc agcattgatg atgccttcga gctgtccctg 120
gaggacgggg gccctgggac cgagtcacgc ggggtcgcgc gctttggggc gctgcacttc 180
gagcgtcggg cccggttcga ggtggctgac gaggacaagc agtcccggct gcgctaccag 240
```

```
aacctggaga acgatgagga tggagcccag gcctctccgg agccggatgg gggagtcggc 300
accagggttag ggccagggat tccagccgaa cttccaccgg ggcttccagt tcttctacct 360
gccctacttc gagaagtgat cgcggcgcag cgtggacccc ttgcgcccac gggggcgccc 420
ctcttgccct gttccgttcc cctcatctca agggaagagg ccctccagga ccctcgaaac 480
cccagcccct agggagtttg ctcaggaagt tcggggcatg caggcctggc cctgggaaaag 540
ccgcccgtcg cctgctctgt gccttaactt attctcgggc cgtgcggctg ctaggttgct 600
gttattttgt gctaataaaa gagtaattaa ttccaaaaaa aaaaaaaaaa aaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg ccgtttttaa 720
ggatccaagn ttacgtnc 738
```

<210> 607

<211> 1348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1328)

<223> n equals a,t,g, or c

<400> 607

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tcgaccacg cgtccgcccc cgcgtccggc ccggtgccaa gcgcagctag ctcagcaggc 60
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gtcagcatga aagccttcag tcccgtgagg tccgttagga aaaacagcct gtcggaccac 180
agcctgggca tctcccgag caaaaccct gtggacgacc cgatgagcct gctatacaac 240
atgaacgact gctactccaa gctcaaggag ctggtgcccc gcatccccca gaacaagaag 300
gtgagcaaga tggaaatcct gcagcacgtc atcgactaca tcttggaacct gcagatcgcc 360
ctggactcgc atcccactat tgtcagcctg catcaccaga gacccgggca gaaccaggcg 420
tccaggacgc cgctgaccac cctcaacacg gatatcagca tcctgtcctt gcaggcttct 480
gaattccctt ctgagttaat gtcaaatgac agcaaagcac tgtgtggctg aataagcggg 540
gttcatgatt tcttttatct tttgcacaac aacaacaaca acaaattcac ggaatctttt 600
aagtgtgaa cttatttttc aaccatttca caaggaggac aagttgaatg gaccttttta 660
aaaagaaaaa aaaaatggaa ggaaaactaa gaatgatcat cttcccaggg tgttctctta 720
cttggaactgt gatattcggt atttatgaaa aagactttta aatgcccttt ctgcagttgg 780
aagggtttct ttatatacta ttcccaccat ggggagcgaa aacgttaaaa tcacaaggaa 840
ttgcccatac taagcagact ttgccttttt tcaaagggtg agcgtgaata ccagaaggat 900
ccagtattca gtcacttaaa tgaagtcttt tggtcagaaa ttaccttttt gacacaagcc 960
tactgaatgc tgtgtatata tttatatata aatatatcta tttgagtga accttgtgaa 1020
ctctttaatt agagttttct tgtatagtg cagagatgtc tatttctgca ttcaaaagt 1080
taatgatgta cttattcatg ctaaactttt tataaaagtt tagttgtaaa ctttaacctt 1140
ttatacaaaa taaatcaagt gtgtttattg aatgggtgatt gcctgcttta tttcagagga 1200
ccagtgcctt gatttttatt atgctatgtt ataactgaac ccaaataaat acaagttcaa 1260
atttatgtag actgtataag attataataa aacatgtctg aagtcaaaaa aaaaaaaaaa 1320
aaaaattnct cggccgacaa gggaattc 1348
```

<210> 608

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (690)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (703)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (718)
 <223> n equals a,t,g, or c

<400> 608
 ggcttaaatg tgattcttga tactgtttta agtatttagg ttgcaattaa ctttggcaaaa 60
 gtcagtcgac ataagccctg tggatatggc cttatgtaca ctgtaatgca gacaggtgct 120
 tttcatcatt catgtaacat tctcacacag ttgaggrtat tcatctcctc accaattcca 180
 gattgtraat gtacywtctt aaacaactct tgaggtcacc aaacagtagt tatttgactg 240
 ttaatagggtg ctacttgctt gcaaggattt ggagatgtaa acatgaagaa aatatagtta 300
 ctgcctgcaa agaattaaca tccgtctagt gggagaaaca aacacacccc actcactaag 360
 tatggaaaac tgattctggg aggaagcaga aatgtcccta gataacagca tgtattgcag 420
 atacccaa atgtttattgtt ttctcagccc ttcaattttg cttttctctc tcaa atgcta 480
 cagactcaat ttaa atctta ctttgattg ttgaaaaaag tcaactaagat gtgaatacag 540
 aatagacatt gagaggttat atatgtccaa aactcatctg tccagcagtc accgtcctct 600
 tcagagtggc cacgttgggc agrtgggcac aggtgctggg gatgcccctc ckggggcaaaa 660
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 ac 722

<210> 609
 <211> 330
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (315)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (321)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (330)
 <223> n equals a,t,g, or c

<400> 609
 ggcagagtat ttactgact aaatattact atataaacat tttcatatct tgccacttca 60

```

cctaacaata cagcacaagc agcttctcat ggcattaaga attgtttgta catgtaattt 120
tgaatggctg tatgctgttt catcttaaga atataccata attctaattt tcatcatta 180
taatagcact gtgacgaaca tccttcttaa caaaattctt tgtctgcacc tatggttatt 240
ttctaaggta grttattaga atttgaaatg ccttgcacaa gggacagtaa ctttttcacc 300
cttagttttc agggnggacc ngttgtctcn                                     330

```

<210> 610

<211> 1866

<212> DNA

<213> Homo sapiens

<400> 610

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ggcctcccaa agtggtgaga ttacaggtgt gagccaccat gctcgtgag agcagatatt 60
tgaaatgtca ctttgagttc tgagaaaaag taaaaagcca gaagacatac tagatatata 120
aatatattac tgcttaaaaa gatctcctaw aaagaaatgt atcmagtgt tgaatcaaag 180
tctgaaagaa agatgaagag ccaccagact tctaggtagg ttacatcca tcatgttcct 240
cttgactgcc tttgtttgtc gtttagtttt ttgctccact caagcctgtt agaatcacca 300
tggaatacag ctccagtggg aaggccactg gagaagctga tgtgcacttt gagacccatg 360
aggatgctgt tgcagcgatg ctcaaggatc ggtcccacgt tcatcatagg tatattgaac 420
tgttcctgaa ttcattgtcca aaaggaaaat aagactctag gggctccaga taataaggg 480
gaagcaagaa gcatttcatt tgcacatctt tcttggaactt gggatataca gttccagt 540
attagcagca actgctaggg aatgattttt ggtgttttg gttaattgct tctaagaaaa 600
gtttcatagt ggactgttta gaagaagaaa tgaaagatcc agtttgggat tatgaaataa 660
accacaaatt aaaatttttg tttaaactgt ccaggatctg atttaaaaaat atggctcttg 720
ttttatatga ttaaatgggtt tgttttcata gatgatattg tactcattgt aaagaccaca 780
tatttttatt cagcagtgtt ctttaaaccg tttcatttaa aaagtaactt ttttttttg 840
cctgtgaatt gagtgctctg atgtaaaact tctcatggag tgaaacagtg atttatttta 900
accaaacatt caccaaagca aagaacggtt tcagacctt gaactggtat ggtttggcag 960
aatagtttta aattttgctg tatttgatta cttagagata ggaattttta aaatcaaaa 1020
caaaaaatac cacagcttag tgtaaatgac aatttggcgg ttttatgtct ttagaaatgt 1080
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gcattctagt cttaacttaa aagttgtcta aactgtccct ccctggcttt ttttggttg 1200
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atcagtctcc tcatttgctt tttaaatgga gtagtacatc ccatatttta gaacaagtag 1380
gggtgccttg cttaaataaa aatagcattt aatgtataat tgtgtgaagg gtttatggat 1440
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atttaaatat tggacaaaat ggctggcttc aaaatatagt cattaataaa ctaactttat 1560
gtgcacctgt gtaggagaat caaaatcctg tatgctttct ttgccttggt cctgttctca 1620
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tctgacaggt gatacctgga agagagacta tgtcttctct tacttaatac ataaccatct 1740
ttgattacca gctaagatgc gaaatcactg tactgtagtc aataaatgaa gacttgtttc 1800
aggaaaaaaa aaaaaaaaaa aaaaaaaaaa aagttttgcc ctatagtgat cgtttacaag 1860
tcgacg                                     1866

```

<210> 611

<211> 2176

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (2162)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2168)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2169)
<223> n equals a,t,g, or c

<400> 611
gcccacgcgt cccatcaact ctaaatacaa aatcttatct gagtctcacc aactcaaaaag 60
tctcaaatct cacattgaag ccattctaaat taagtttggg agaggatctg tgtgtgattt 120
ctgggacata attccaactg tgcacttggtg aacctagaaa acaagttatc tgttcccaag 180
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<211> 3619

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<400> 612

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<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<400> 613

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<210> 614

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 614

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gttcgcggga gtccgccgga agactacagg cttggacagg tcgccagtag cttatttcgc 180
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<210> 615

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 615

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gagaaatgcc ttataagtgc aatgaatgtg ggaratattt tagccatcac tccaatctaa 180
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<210> 616

<211> 2174

<212> DNA

<213> Homo sapiens

<400> 616

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<210> 617

<211> 3147

<212> DNA

<213> Homo sapiens

<400> 617

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<210> 618

<211> 2529

<212> DNA

<213> Homo sapiens

<400> 618

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ttctgggcag ccagagccgc aaaggtggag ccgcgttggc gccctccgcg ggaccagcgc 180
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aaaaaaaaa 2529

```

<210> 619

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 619

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tcctgttgac tgccctggctg cccctctccc tactcctcgg ttccctggtga agaggctgcg 180
cgctgctgtt tggggagggg gtgtgtggag ccgggtcctg tgtccgcagt ggctgctgtc 240
ggggggtcgc ctgttcgcgg aggtgaggag agactccttg ggggtcgagc acataacggg 300
gttcgggtgt ctctgtgtgt aacatcacag ggtttgtgga tgcacttaga tgtttgcaat 360
gagcactgtg gctggcatgc cccagtgttt tggataccaa tgcataggac tccatagtaa 420
tcgaatttac cagaggcgaa cgatcatgsa catagtgatc ccattggggg ttgatacagc 480
agagacgtca wacttggraa atggctgcar gttcagaaym agtawttaa attggttaca 540
aaagcaaaaa a 551

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<210> 620

<211> 1735

<212> DNA

<213> Homo sapiens

<400> 620

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tcaaaacaaa agcaaaacac agtgaacttc accacggagc tgcacagcgt ggggaactca 180
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tttgctttga tttgttcctc agtacattaa aatgatccac accttgaaca ctgccctctc 360
tagaagggtt attttgatca gccttttgaa gatgggtgtc gtttccctaa cttatctcac 420

```

```

agaat ttttga gtgtt gtatt tggca agttc tgagatt tgc cttct gtctt atgccaaaca 480
cccct tttcta agagctgtcc ccgct tagtt ttaga agtac taggggt ttt catacttatt 540
ttatagaaca cccatttata tttatttctg tatatagaac taaaaaaaac agtagtgta 600
aaaatctttg ttgtgggttg agcatctttg ctgcttttgg attgagatgg cgaatcaagg 660
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atctatatca gagttatatt ttaattttta ttctaaatga aaaaaaccct ttttacttca 1680
aaaaaattgt aagccacatt gttaataaag taaaaataaa ttctaaaaaa aaaaa 1735

```

<210> 621

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 621

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gtggcactta gagtcttttg tgccataatg cagcagtagt gagggaggat tttatggaga 180
aatggggata gtcttcatga ccacaaataa ataaaggaaa actaagctgc attgtgggtt 240
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attaaccaac ataatttttt ttagatcgag tcagcataaa tttctaagtc agcctctagt 420
cgtggttcat ctctttcacc tgcattttat ttggtgtttg tctgaagaaa ggaaagagga 480
aagcaaatac gaattgtact atttgtacca aatctttggg attcattggc aaataatttc 540
agtgtgggtg attattaaat agaaaaaaa aattttgttt cctaggttga aggtctaatt 600
gatacgtttg acttatgatg accatttatg cactttcaaa tgaatttgct ttcaaaataa 660
atgaagagca gctgtccttc tttcctcttt taagtgttca gctgtggcat gctcagaggt 720
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<210> 622

<211> 670

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (598)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (645)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<400> 622

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ggcgtcagcg agtgcgcggt ccagtgcggc cggaacctgg cgcaactcct agagcgggtcc 180
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ttcttgaaag                                     670
```

<210> 623

<211> 2163

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 623

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tactactacg acggggatgt tggaaattac tattatggac aaggccaccc aatgaagcct 180
caccgaatcc gcatgactca taatttgctg ctcaactatg gtctctaccg aaaaatggaa 240
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attaaattct tgcgtcccat ccgtccagat aacatgtcgg agtacagcaa gcagatgcag 360
agattcaacg ttggtgagga ctgtccagta ttcgatggcc tgtttgagtt ctgtcagttg 420
tctactggtg gttctgtggc aagtgtgtgt aaacttaata agcagcagac ggacatcgct 480
gtgaattggg ctggggggcct gcaccatgca aagaagtccg aggcacatctgg cttctgttac 540
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aaa 2163

<210> 624

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<400> 624

ggcgagatct tctctgtggc ggagacagcc aggttggcag ctgacgggac agccggggtc 60

tat t t t t g t t g c g g g t t t t c a g c a a a t c c a g g g c t g g t c t g g a g g c g c g a a a c t t a a g g c 120
a t a c a g a a c g a t g g a g t a t a t g g c a g a a t c c a c c g a c c g c a g c c c t g g a c a c a t c t t g t g 180
c t g t g a g t g t g g t g t t c c g a t a a g t c c a a t t c c t g c c a a t a t t t g t g t g g c c t g t t t g c g 240
a a g t a a a g t g g a c a t c a g c c a a g g t a t t c c g a a a c a a g t c t c g a t t t c g t t c t g c a a a c a 300
a t g t c a a a g g t a t t t t c a a c c a c c a g g a a c t t g g a t a c a g t g t g c t t t a g a a t c c a g g g a 360
a c t t c t t g c t t t g t g c t t g a a a a a a t c a a a g c c c t c t g a g t a a g g t a c g g c t t g t a g a 420
t g c a g g c t t t g t t t g g a c t g a g c c t c a t t c t a a g a g a c t t a a a g k t a a a c t g a c t a t t c a 480
g a a a g a g g t g a t g a a t g g t g c t a t c c t t c a a c a a g t g t t t g t g g t g g a t t a t g k t g k c c c 540
c a a a t g g g g g g a g a t g g c a t a n a g a n a a c t a a g g a t t c t g g a a a g g t t g g a t t a a g g g g n 600
g 601

<210> 625

<211> 593

<212> DNA

<213> Homo sapiens

<400> 625

g a t g c a g t t t g c t t g g c a g a g c t a t a a g c g t t a t g c a a t g g g g a a a a c g a a c t c c g t c c 60
a c t a a c a a a a g a t g g c t a c g a g g g t a a c a t g t t c g g a g g c c t c a g c g g g g c a a c a g t c a t 120
t g a c t c c c t c g a t a c c c t c t a c c t c a t g g a g c t g a a g g a g g a g t t c c a g g a g g c c a a g g c 180
c t g g g t g g g a g a g a g c t t c c a c t g a a c g t g a g c g g a g a a g c a t c c t t g t t g a g g t g a a 240
c a t c c g c t a c a t c g g g g g a c t c c t c t c a g c c t t c t a c c t g a c a g g a g a a g a g g t g t t c c g 300
a a t a a a g g c c a t c a g g c t g g g a g a g a g c t c c t g c c g g c g t t c a a c a c c c c a c g g g a a t 360
c c c a a g g g c g t g g t g a g c t t c a a a a g t g g g a a c t g g g g c t g g g c c a c a g c c g g c a g c a g 420
c a g c a t c t t g g c g g a g t t t g g a t c c c t g c a c t t g g a a t t c t t a c a c c t c a c t g a a c t c t c 480
t g g c a a c c a g g t c t t c g c t g a a a a g g t c a g g a a c a t c c g c a a g g t c c t c a g g a a g w t c g a 540
a a a g c c c t t t g g c c t y t a c t c c a a c t k a g m c a t g g t g t t g c a a a c a g a t c c c c 593

<210> 626

<211> 2272

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2267)

<223> n equals a,t,g, or c

<400> 626

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g g a c t c g c g t c g c g g c g c g g a g a c g t g a a g c t c t c g a g g c t c c t c c c g c t g c g g g t c g g 120
c g c t c g c c c t c g c t c t c c t c g c c t c c g c c c g g c c c c g c g c c c c c a t g g a g a 180
a g a c t g a g c t g a t c c a g a a g g c a a g c t g g c g a g c a g g c c g a g c g c t a c g a c g a c a t g g 240
c c a c c t g c a t g a a g g c a g t g a c c g a g c a g g g c g c c g a g c t g t c c a a c a g a g a g c g a a c c 300
t g c t c t c c g t g g c c t a c a a g a a c g t g g t c g g g g c c g c a g t c c g c c t g g a g g g t c a t c t c 360
t a g c a t c g a g c a g a a g a c c g a c a c c t c c g a c a a g a a g t t g c a g c t g a t t a a g g a c t a t c g 420
g g a g a a a g t g g a g t c c g a g c t g a g a t c c a t c t g c a c c a c g g t g c t g g a a t t g t t g g a t a a 480
a t a t t t a a t a g c c a a t g c a a c t a a t c c a g a g a t a a g g t c t t c t a t c t g a a a t g a a g g g 540
t g a t t a c t t c c g g t a c c t t g c t g a a g t t g c g t g t g g t g a t g a t c g a a a a c a a a c g a t a g a 600
t a a t t c c c a a g g a g c t t a c c a a g a g g c a t t t g a t a t a a g c a a g a a a g a g a t g c a a c c c a c 660
a c a c c c a a t c c g c c t g g g g c t t g c t c t t a a c t t t t c t g t a t t t a c t a t g a g a t t c t t a a 720

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<210> 627

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (863)

<223> n equals a,t,g, or c

<400> 627

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cggcgccggc ggacgagcgg agtccagagg acggagaaga cgaggagag gaggagcagt 180
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atgctgatac agaaggcaat aataaaacag tgctaaaata taaatgccat acaatgaaga 420
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aattggaaga ggaagagatt caaatgaacg acagttcaaa cctgagttgt gaacaggaga 660
aaccaatgca cttggaaata gaagattctg gtcctcttat tgatatacct tctgagacag 720
aaggttctgt ttttatggaa actcaaatgc tgccttagaa atcactccta gatgaaatgt 780
ttctcataat aacttgtaaa gaacttttta gagttgttac ataaaaataa ttgctgtgta 840
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa t 871
```

<210> 628

<211> 779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<400> 628

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gctgcggaat cgcgtcaccg accgctactt tcggatccag gaggtgctga agcacgccag 180
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taatcgaatt acagctgcta gccaggaaca tggactgaag tatccagcgc tcattgggaa 360
tttagttaag tgccagggtg agctcaacag gaaagtccta gcggatctgg ccattctacga 420
gccaaagact ttcaaactct tggtgcctt ggccagtagg aggcgacacg aaggatttgc 480
tgctgccttg ggggatggga aggaacctga aggcattttt tccagagtgg tgcagtacca 540
ctgaggactg ttgctgtatt gattaggaaa agagacagag taatttgtag tttgtttgat 600
ttatactttt gtttatctac aacccaataa cagacatgag ggatggccct gtctctctgg 660
gacagagcct cacagatgat gtccatgttt tgtgtgaatg aaactcaaac actcttcaaa 720
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 779
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<210> 629

<211> 1835

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<400> 629

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agtctggaag gagagaacat ccggaagatg caggggtctca tggtccgggtg cagcgccagc 180
tgttgtagag acagccaggc ctccatgaag caggtgcacc agtgcacga gcgctgccat 240
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ctggcccggt gcaccatgca ttgcaaygac aaagccaaag attcaataga tgctgggagt 360
aaggagcttc aggtgaagca gcagctggac agttgtgtga ccaagtgtgt ggatgaccac 420
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atgcacctca tcccaactat gaccaagaag atgaaggagg ctctcttatac aattggaaaa 480
taaaagtatt tgccagtggc catcagggct gagggcaaga atatatTTTT tataaggaat 540
tggaattttt agtcttttaa gcaaagttta cgaatgaaga aatgaaggat ggccacaagc 600
gtaaggcata tgtcacttgc ctctggacac tggttatttt atgtttcagt ccctaaaaaa 660
tgaaatggaa aaaagtgggtg ctaaatacgag tcagagatat tacaggagag ttttagagct 720
tattatttcc tgtggccagt gcttgtcctg gcagtaaggc tytccctgt aacaagccag 780
agccctccaa ggtaccagac tcttcttact acacagggtac taacaggctg gcagggttaga 840
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tcaccaactt attacttgaa attataatat agcctgtccg tttgctgttt ccaggctgtg 1740
atatattttc ctagtgggtt gactttaaaa ataaataagg ttttaatttt tccccaaaa 1800
aaaaaaaaa aaaaaaaaaa aaaaataaaa aaatn 1835

<210> 630

<211> 1097

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 630

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gagctaagat gactaatttg atgattttcg atctcttttc ccctgtcctg attttaaaag 120
ccccctcctt tttttttttt tttttttttt ctttttttag gcatatgtag taatattaga 180
aacattttaat ttgggaaact ttgattcttg aaagagaaaa caaaagcatg tgaataaact 240
ttgaagtgtt cacctcagtt tgggaccaa ctgcttggat ctttgtaaaa accggttttg 300
tatgtcaagg aggagttaa ggcccttccg accaccttgt gttcccttt tctgcgcasc 360
atgtatcacg tggagtgtct ccttaccaca cctcacgtgc ccctgagccc tatttcctga 420
tttcttcttg gctggacttc cccgttctcc accagcagct ccagtatccc aaactttcta 480
gtcctgtga tcctcccagc aacgggggtg aaactggagg gcagtgtctg gtctgttttc 540
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ctgggtgtgt caggggtttt tttgggtttt tttttttttt ctttgtcttt ttaaccttaa 720
gctgtttaag ttgaagcatt ctcatgtgt tggggggaaa catcctctta aaatgggtcc 780
ttgtgcttgc cttctgggga ggcggtcctg agcagggtgaa tcataaggca tttatgcata 840
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tgctttcccc ttactttgct acattttctat agttaagttg gttttacttg aatgattcat 960
gttttaggggg aaaatgaaaa tctcccttaa aatttgtttc aactcctcct gcaaataaaa 1020
taaatagaagt ggcagatgta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaa 1097

<210> 631

<211> 1537

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 631

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cgcccgctgc gcctcctcga cggcagagca ggcttgctcg cccgtgggag cgtcccgcc 240
gagaagccct gaggggggag gggaggccat tttgtcccga ccgactcccc ggaaccgggc 300
ggagcggctg ggagaggctg cggagccgcg gtcgcccgcc tcggaggcac tggacgccc 360
cactgtcggg gcttcctcaa agctgttcgt aggtcgcccg cgccgtctcg agcctttttc 420
ccacgcttcc ccggtcctcc ggcctgagaa cggccgagtg aggagtggc cgtagtgaga 480
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aatagacttc aagatcaaaa cagttgaatt acaaggaaa agatcaagc tacagatatg 720
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aacaaaaaaa tgtatagaaa aatcatgtct gtgacttcat ttttaaagt acttgctcag 1380
ctcaactgca tttcagttgt attatagtcc agttcttctc aacattaaaa cctatagcaa 1440
tcatttcaaa tctattctgc aaattgtata agaataaagt tagaattaac aatttaaaaa 1500
aaaaaaaaaa actcgagggg gggccccggt acccaac 1537

<210> 632

<211> 1901

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1894)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1900)

<223> n equals a,t,g, or c

<400> 632

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cccgggctag cgaaaagtgg gggcagaacg aactacatct cccatcgtgc caggaggcgg 120
tcccgcccggt ttccccctgg gagttgtagt ctaacccccct cggatccaac agcaacctca 180
gtgcgtgaac tctgttatcc agaaggcctc gccctgccgc cggcgaagct ggaattcgtc 240
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caggtcttct tgactttgag cagctggaac agatcctgga agctattccc cagggtgaagt 720
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aaaaaaaaa aaaaaggggg gccgctttaa agnccaann t 1901
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<210> 633
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1676)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1689)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1712)
<223> n equals a,t,g, or c

<400> 633
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tgtggcctct actacaagct gcacaatgtt aacaggccac tgaccatgaa gaaggaagg 120
atccagactc ggaaccggaa gatgtccaac aagtccaaga agagcaagaa aggggcggag 180
tgcttcgagg agctgtcaaa gtgcatgcag gagaagtcac ccccttcag tgcagctgcc 240
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tccggcattc                                     1750
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<210> 634

<211> 1926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 634

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atggcggcgt tagcggcgtc ttcgtttggg acgaggagag gatccaggag gaggagttgc 180
agagatctat taatgagatg aagcggttgg aagaaatgtc aaatatgttt cagagctctg 240
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gcaaagagca acgttgggaa atggtgatgg ataagaaaca ctttaagctg tggcggcgcc 360
caattacagg caccacctt taccagtacc gagtttttgg aacctacaca gatgtgacac 420
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<210> 635

<211> 1346

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

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<221> misc feature

<222> (1342)

<223> n equals a,t,g, or c

<400> 635

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<211> 1584

<212> DNA

<213> Homo sapiens

<400> 636

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<211> 1663

<212> DNA

<213> Homo sapiens

<400> 637

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